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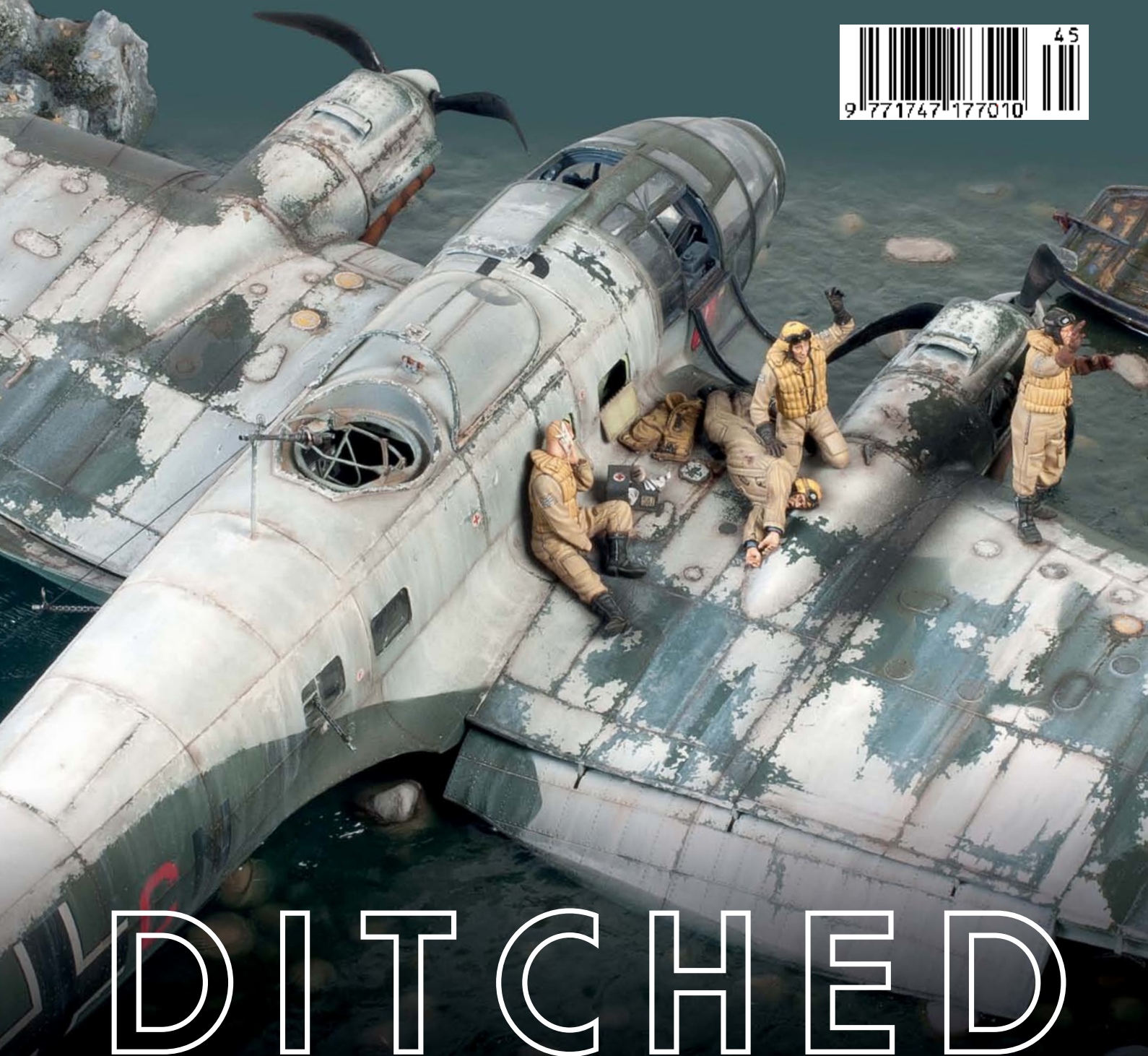
AIR

modeller

45

ISSUE

December / Jan 2012
£6.50 UK \$14.95
www.airmodeller.com



DITCHED

AITOR AZKUE GRACIA'S DRAMATIC 1:32 HEINKEL HE.111 DIORAMA

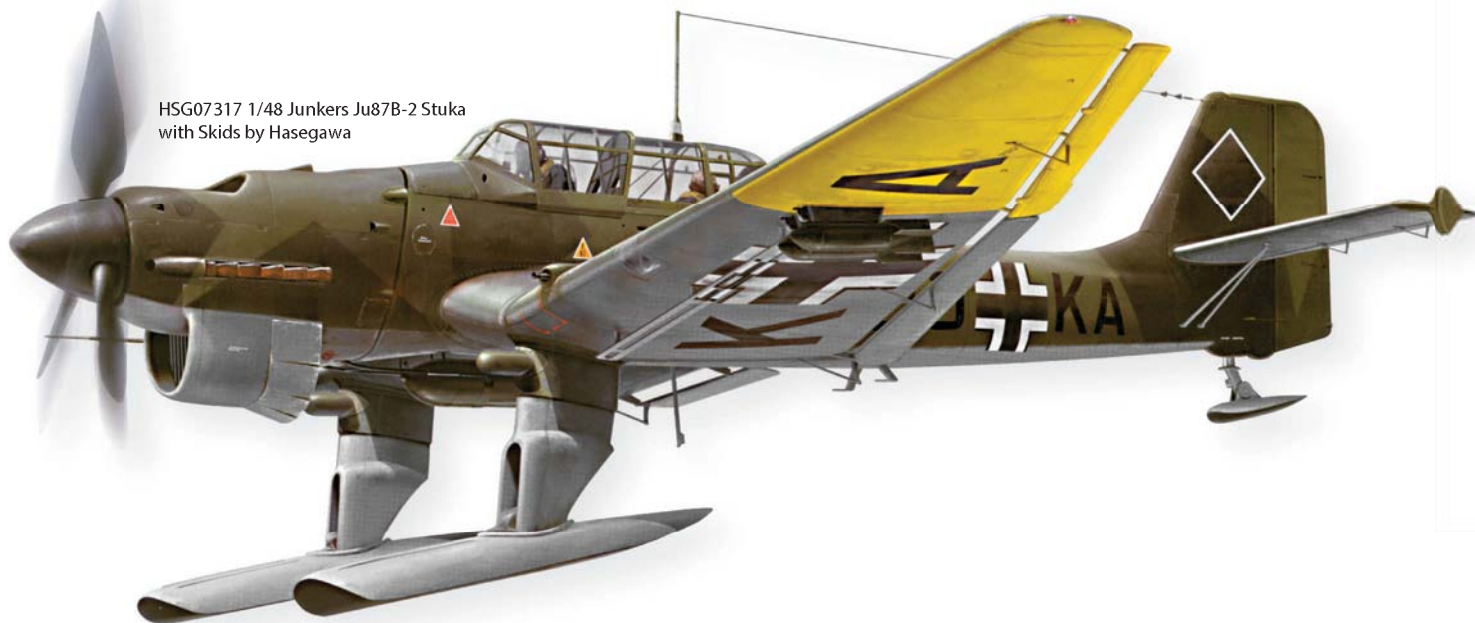


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AFV Modeller is published Bimonthly by
AFV Modeller Ltd
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ISSN 1747-177X



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DITCHED

AITOR AZKUE GRACIA'S DRAMATIC 1:32 HEINKEL HE.111 DIORAMA





FOR ME, DIORAMAS OF AIRCRAFT FOLLOW A SIMILAR THEME, I'M ALWAYS LOOKING FOR IDEAS AND NEW SCENARIOS, SO I ASKED A FRIEND FOR SOME HELP. HE WAS DETERMINED TO FEATURE A HEINKEL HE 111.

A composition based in a forest or in a hangar had been done, I wanted something different but had to take into account the huge size of the aircraft at this scale.

The inspiration came when I was shown one of these aircraft having crash-landed in a river in Norway ... and what caught my attention was the shallow depth of the river, the glass was not broken in the nose of the aircraft and only minimal damage was done to the wings. I did some research and found that a considerable number of these aircraft had to make forced landings in this country, some with relatively little damage, I didn't hesitate to get down to work.

The diorama was to represent an aircraft operating in this area which has had a failure of its left engine and had to make a forced landing. The crew members have been able to evacuate the aircraft (one has succumbed) and they've managed to alert an Army car that was in the area with the use of distress flares. The wooden boat in the corner and the car are included for their interest and enrich the composition.



BUILDING THE HEINKEL

The Heinkel is from Revell and required a number of improvements, although in general the dimensions are correct but I felt the kit lacks detail in places.

For starters, I had to work on the cockpit adding different elements constructed in evergreen, such as the pilot's seat, side bulkheads with wiring etc.

An important detail was that I had to cut the glass side door which was moulded as one piece along with surrounding glass. A closed door did not fit the scene I wanted to represent with the escaping crew. The Eduard photoetch is especially important for this part of the cockpit, and essential to the extra detailed end result.

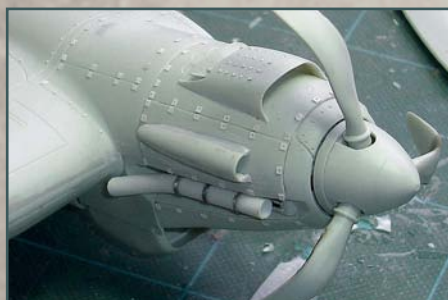


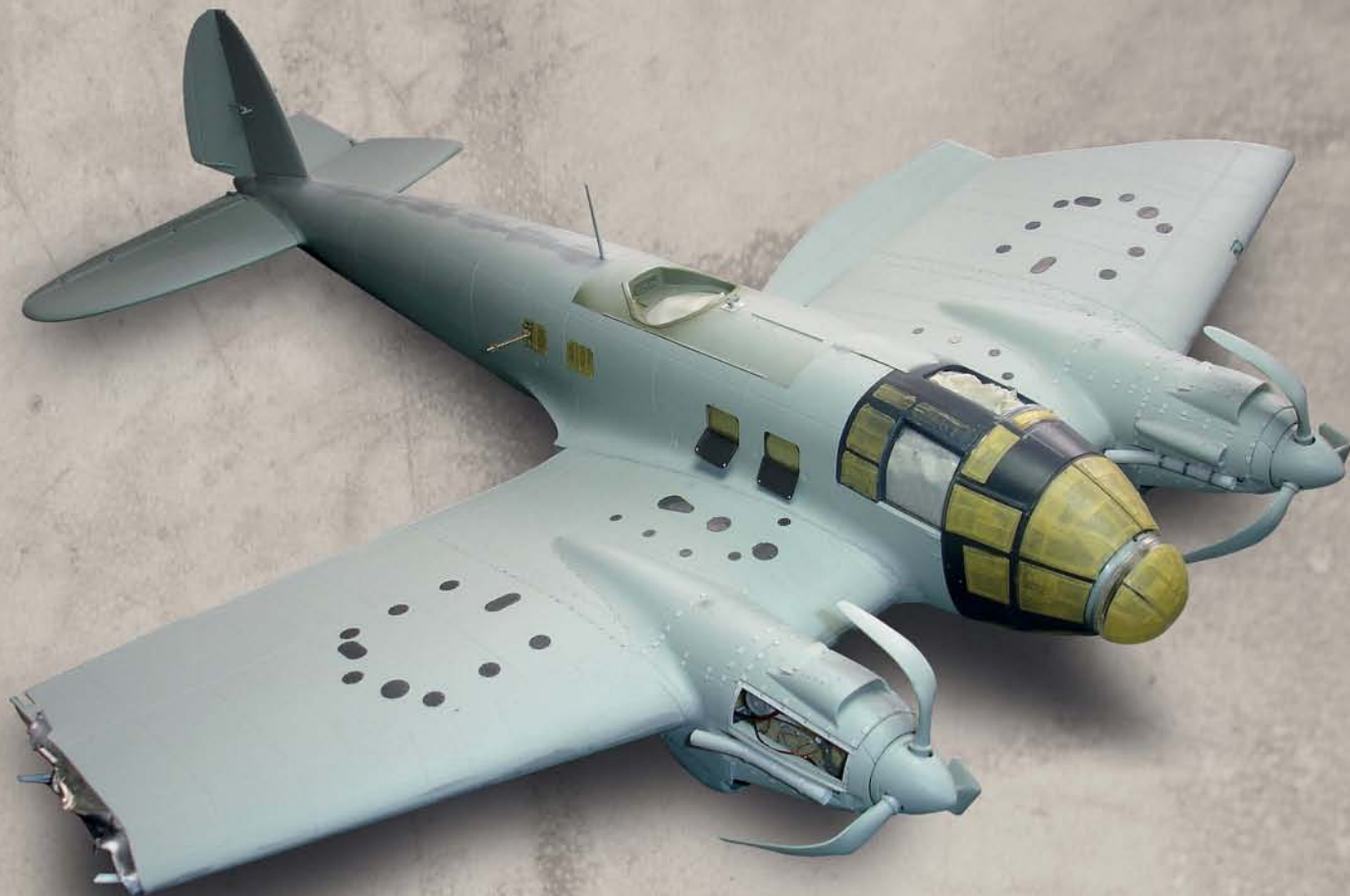
The bomb compartment was made using photoetch from Eduard, which looks great and is of high quality but honestly ... not really worth it because once finished you can barely see the fruits of your labour.

The most laborious part of the build was the rear radio compartment where I had to rebuild all the ribbing, radios, cabinets, etc. This wasn't done too complicated or over-the-top because once again, the detail will be hidden once the fuselage is closed.



On the outside I added Evergreen for little engine cowling details as well as a new exhaust, adapted for this version of the aircraft. The engine has different wiring added from Plus Model. More Eduard photoetch was added to detail the exterior and open canopy door. This aircraft had metal prop blades, to give the effect of impact with the water they were heated and bent.





THE HEINKEL PAINTING & WEATHERING

I used Vallejo "Model Air" acrylics to paint the classic tones of RLM70 and RLM71 on the upper side of the aircraft and RLM76 on the underside. Most important is the masking of the camouflage and the contrast between the green tones.



Once dry, the model is varnished in gloss enamel varnish to create a protective layer between colours and again left to dry. Next, I airbrushed 2 - 3 generous coats of hairspray and quickly position my camouflage masks and proceed to airbrush a layer with white "Model Air".





Next I used some warm water and wetted down areas I wanted to distress the winter camouflage. Using a stiff bristle brush to rub the surface will lift the white paint and create natural looking chipping effects. Gloss varnish was applied over all surfaces then decals were applied followed by a matt varnish after the decals were complete.

The next step is to perform the technique of "mapping" used by armoured vehicle modellers, consisting of successive layers of very dilute colour. It will succeed in creating "layers" of paint which give depth and volume to the surface.

Another product I've used is 'Winter camouflage wash' from MIG productions. I progressively added controlled diluted washes following the airflow direction. Being white and diluted I manage to create an effect of fading paint running along the entire wing surfaces.





1

1 The pigments to add "dust" were also applied to highlight subtly different panels and rivets details.



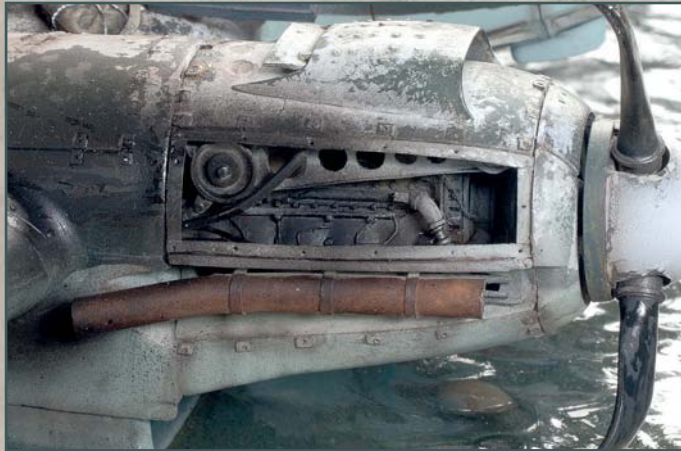
2

2 Similar areas were also detailed one by one with a fine brush working my way around the fuselage.



3

3 Finally different products from AK Interactive used to create grease, fuel, etc. on the wings. "Rain marks" of MIG Production were used along with "Water effects" from Vallejo on a stiff brush, flick with a finger to create splashing. When done from the correct angle realistic patterns of splashing of the water onto the aircraft are achieved.



THIS PROJECT CONCLUDES IN THE NEXT ISSUE...

MODELLED BY **PERIKLIS SALESIOTIS**



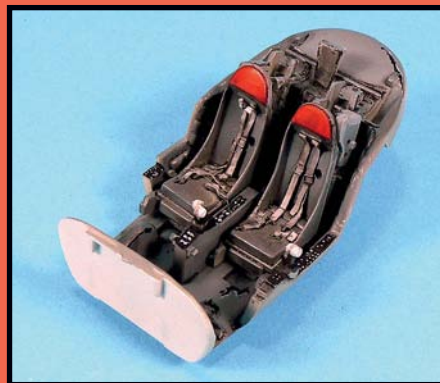
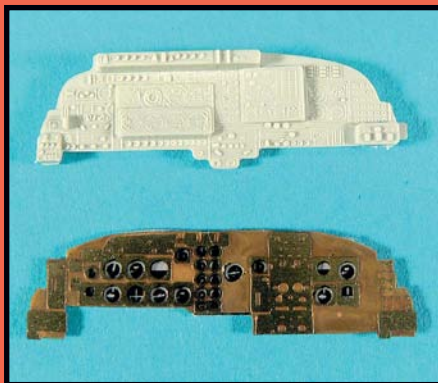
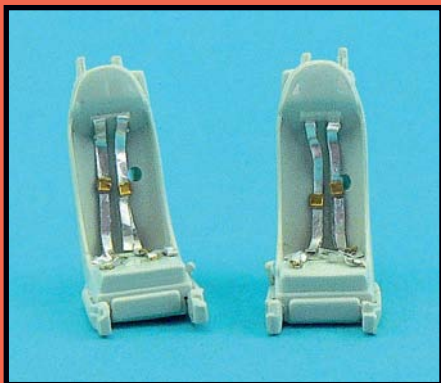
1:48

HAF T-37C

On October 7, 2002, 361 Air Training Squadron at Kalamata Air Base performed the retirement ceremony of the T-37 Tweet after 39 years service with the Hellenic Air Force. The squadron was formed in September 1963 within 112 Combat Wing, with T-37B/Cs as the 360th Jet Training Squadron. In 1971 it was relocated to Kalamata Airport and three years later was renamed 361 Basic Training Squadron. The Hellenic Air Force received its first 25 T-37Cs in the 1960s, and these aircraft joined the then 361 Basic Training Squadron based at Kalamata AB (120 Air Training Wing). In the 1970s and 1980s, 15 more aircraft were bought from the Jordanian Air Force and added to the fleet.

Encore's recent re-packaging of the original Monogram A-37 Dragonfly does provide various build options if one is prepared to explore conversion and after-market material. Previously though, these basic sprues were released by Revell, without resin and metal parts, and it was this boxing used for the project (it is out of production, but can still be found at certain retailers or second-hand). The kit is a typical Monogram product with all the expected good and bad points for kits of that age. It comes with a respectable cockpit (although not correct for a T-37) and landing gear, but the raised detail and oversized rivets may irk more inexperienced modellers, or those who swear by engraved detail. It was decided to remove all raised lines and re-scribe the whole kit, as the extent of the





changes required for conversion to T-37 standard would have erased them anyway. The first job was to re-scribe and rivet the whole model. As a guide, the already raised panel lines were used after they were slightly sanded. Due to the fact that not all existing lines were correct (and some were missing completely), reference photos were consulted to make re-scribing as accurate as possible. Straight panel lines were scribed with the use of a Trumpeter scribing tool and Verlinden flexible rulers. For tighter areas, circles and oval panels guided a needle in a pin vice, and for rivets a Radub Riveter-R tool came to the rescue. After all panel lines were scribed the model was sanded with 600, 800 and finally 1000 grit abrasive paper. Finally, when all dust was removed with an old toothbrush, Tamiya liquid cement was run along all panel lines to neaten them. All time consuming but well worth it.



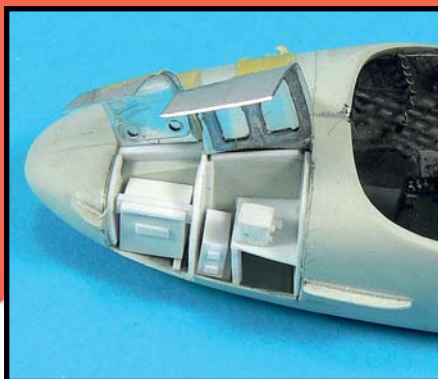
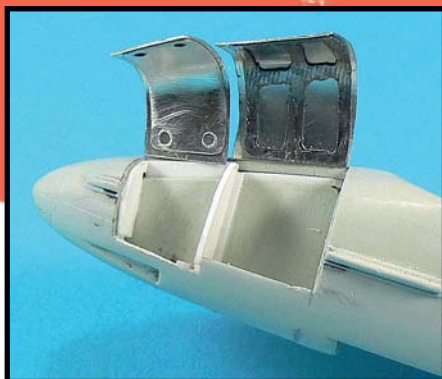
The operating theatre...

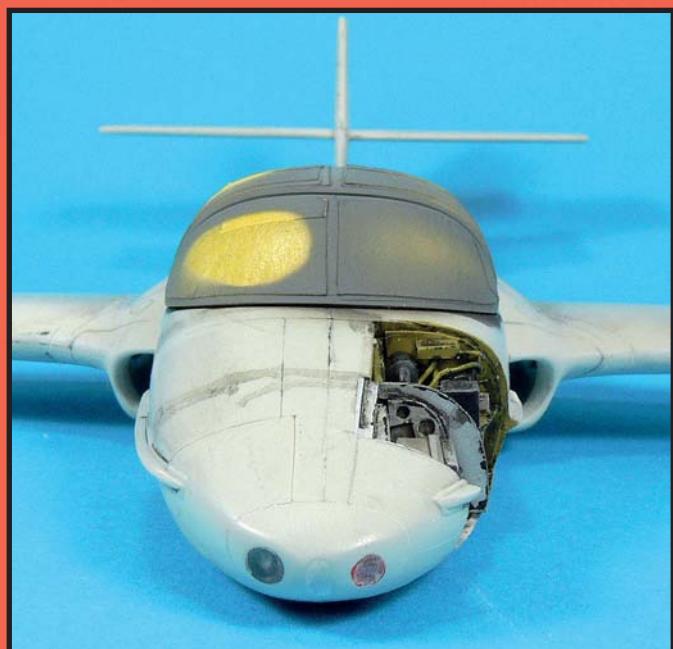
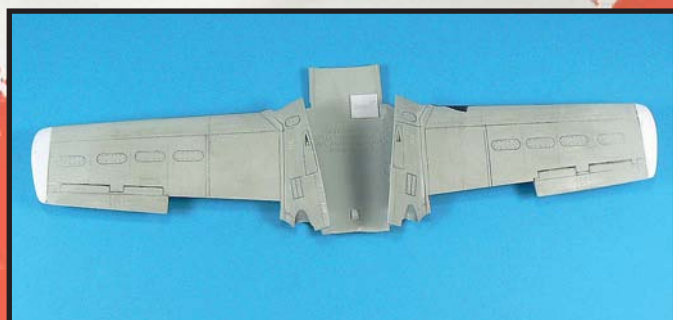
First on the conversion list were the wings, and more specifically the wing tips as the T-37B/Cs of the Hellenic Air Force didn't carry tip tanks. Therefore, they had to be removed and the wing tips re-constructed. Tip tanks came as part of the upper and lower wing halves, and they were removed with a modelling saw. With plastic strip, new wing tips were formed after careful sanding. Then, all pylon openings on the wings were closed and sanded flat as the plan was to create new items from

scratch.

Following the wing work, numerous lumps, bumps and antennae on the spine and underside of the aircraft were removed, and the 'Foreign Object Damage' cover areas were filled and sanded smooth. Using photos of the real aircraft, new underside air inlets were created. After these relatively easy changes, attention turned to the cockpit. The detail in this area was good but there's always room for improvement. The main differences here between the A-37 and T-

37 are on the instrument panel and ejection seat headrests. This panel was replaced by a photo-etched item, while the actual instrument indications were created in AutoCAD and printed on paper. To represent glass clear tape was stuck on the printout. Seat headrests were sanded flat and belts were created with aluminium foil and buckles from Airwaves' dedicated set (AEC48046, Cessna A-37 Dragonfly). Airwaves parts also provided canopy detail, and a simple Head-up Display was fashioned from clear plastic sheet. Final



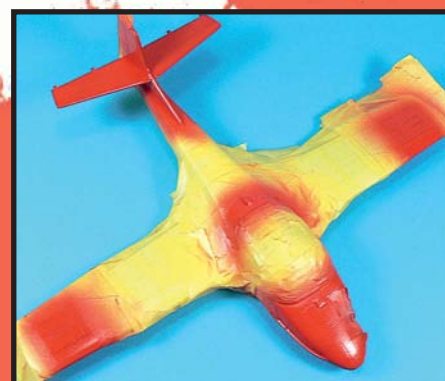


work in the cockpit involved the removal of the fuse panel on the instructor's side as T-37s didn't have that unit. Fabric for the wall was created by embossing aluminium foil, glued with cyanoacrylate. Tamiya XF-6 Light Grey mixed with a hint of White was applied to the cockpit. After drying, the walls received a wash of thinned Black oil paint, followed by dry-brushing of lighter

Grey. Individual details were picked out with a fine brush and Black paint. The instrument panel, side consoles and coaming received Tamiya XF-1 Flat Black, and individual switches and knobs were detailed with Grey, Yellow and Red. Seat headrests, after sanding, were painted Red and the belts in Grey.

A small nose job...

It was decided to show the battery and electronic bays in the open position, with their internal detail made from scratch. The actual battery and electronic boxes were scratch-built from plastic and wire, and required much dry fitting. The bays were painted White (battery) and Zinc Chromate Yellow (electronics), and the boxes



themselves were painted Black and received a light grey dry-brushing. Bay doors were constructed from thin aluminium, with internal ribs made from pewter as it was easy to work with. The previously removed kit panels were used to curve and form the new covers. At this stage the two fuselage halves were glued together and weight was added in the nose to avoid tail-sitting. The fit of the fuselage and wings was excellent, and a minimum of filler was required. Flaps and horizontal stabilisers were cut out and reposed in the lowered position, which was usual for this aircraft when parked. Further conversion work took place in the air intake area. A-37 intakes were slightly different due to larger engines, so the

existing intakes needed modifying. Additionally, splitter plates were added from thick plastic card, and the final shape was achieved with filing and filling. Also, two thrust diverters made from aluminium foil were added in the exhaust area. The exhaust cans were reduced in length and size, as they were smaller on the T-37...and too thick on the kit. Focus then turned to the main gear well doors. The A-37 doors were bulkier due to bigger tyres than those fitted to the T-37. Therefore, new main well doors were constructed from thin aluminium sheet and plastic strip. Revell Aluminium paint was applied to the gear and wells although White could also be used. The tyres came from a Hasegawa 1/72 F-4J and were painted

with Tamiya XF-69 NATO Black. With the windscreen masked and in place, and the canopy temporarily positioned with Blu-Tack, the model was ready for painting.

High-visibility...

After being cleaned the Tweet received a coat of Grey primer and every join was inspected (and any mistakes corrected). The first top colour was Tamiya X-1 Gloss White, and after overnight drying in a dust-free area the model was masked before the application of Day-Glo Orange (mixed from equal measures of Tamiya X-7 Red and X-26 Clear Orange) was applied. Finally, the anti-glare panel, wing tip and tail fin areas and the air intakes were painted Tamiya XF-1 Flat Black after





careful masking. Yet again the model was left to dry overnight, then a coat of Johnson's Klear was sprayed before decals and weathering.

After all this conversion work one would think that the worst and most difficult part of the build was over. Unfortunately this was not so, as the next major issue was the markings...or to be more precise, the lack of them. Greek T-37s sported stencils in Greek letters, with Latin characters applied on top of existing US Air Force stencils. At the time of writing there were no aftermarket decals with all these different stencils, so the only way was to create them from scratch. All were drawn in AutoCAD following the US Air Force Technical Order, and were printed to scale on clear decal sheet. For the Greek roundels, spares from past builds were used. Actual decal application was straight forward with Gunze Softer and Setter solutions. Two coats of Klear were then applied in preparation for washes and weathering; the model received a wash of black and brown oil paint mixed together. With the airbrush loaded with Flat Black, heavily diluted with cellulose thinner, exhaust stains were added to the fuselage.

A challenging build...

This diminutive trainer, in which numerous Hellenic Air Force pilots earned their wings, was finally finished. It wasn't an easy ride due to the detailed conversion work, along with having to custom-make some of the decals. Good reference photos were vital, but the project does provide an eye-catching and interesting result.



VAQ-136 GAUNTLETS
PROWLER
EA-6B 1:48TH SCALE KINETIC KIT





The Grumman EA-6B Prowler is a version of the A-6 Intruder specializing in electronic warfare and the control of air operations. Compared to the Intruder, the fuselage was lengthened by a metre (in particular to accommodate two additional crew members) and the total weight increased by more than three tons (mainly electric equipment).

The basis of the equipment is jamming of signals, the AN / ALQ-99 Tactical Jamming System. The pod at the top of the spine contains various detectors intended to spot the enemy's radar broadcasts with the aim of jamming the signals.

The Prowler can also take up to 4 nacelles of additional equipment under the wings and can be armed with anti-radar missiles AGM-88 HARM if required. Designed to operate from aircraft carriers or from advanced bases, The Prowler is a system completely integrated by electronic warfare and capable of operating in all weathers at long distances. The primary mission of the aircraft is to provide protection from air attacks, block signals and obtain information from the electronic broadcasts in the battle zone.

THE KIT

Another unusual kit offering here from Kinetic, who continue to surprise us! With this new state of the art kit we have at last recessed panel lines, the shape is correct and the option to fold the wings is included, something which was not possible in the older Monogram / Revell kits. The cockpit is more than basic, but I still decided to use a newly released replacement from Aires, and wheels will also will be replaced by those in resin. The big weak points of this kit are the air intake (typically for Kinetic), and the adjustments required to many of the parts.



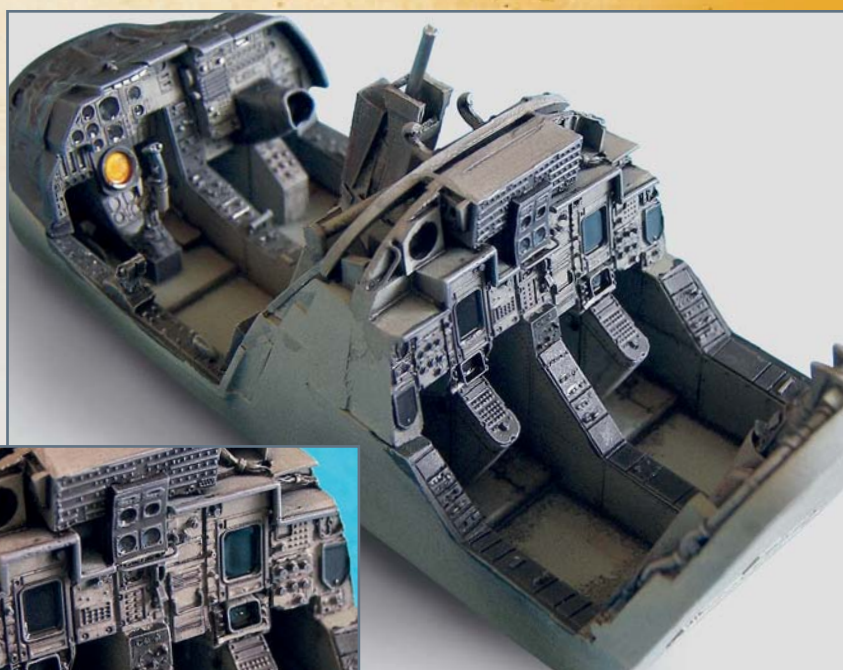
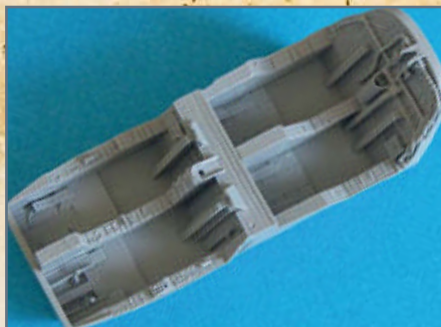
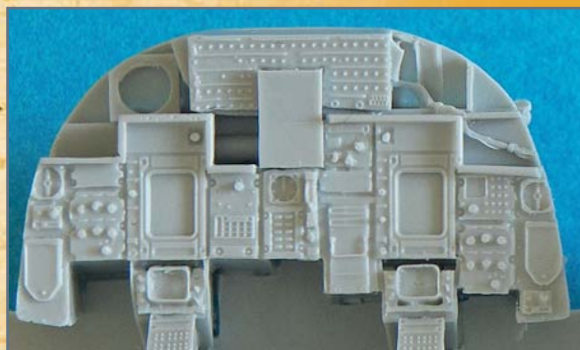
EA-6B Prowler
BuNo 163524
12 avril 2007

VAQ-136 "GAUNTLETS"
NAF Atsugi, Japan

THE COCKPIT

As any aircraft, the cockpit is one of the first things to be tackled, I decided to use the Aires resin set. The detail is excellent but the fit requires sanding and trimming of the fuselage parts and bulkheads.

The painting of the cockpit is done using a base of light grey, the instruments and panels lines are picked out using brushed matt black and a dark wash applied over the panel. I then used white acrylic paint to pick out highlights and finally Raw Sienna oil colour washes. Once dried it is necessary to fix the entire cockpit and to reinforcements from the bottom, the nose not being attached.



THE FUSELAGE

The fuselage halves join well together and at this stage we can put the air inlets into position, in my build I missed 2 parts (G17 and G18) these parts represent the turbines and I had upgrade parts to use, using the instructions as a reference I managed to adjust the distance left by the lack of these parts.

I decided to use resin engine parts from Steel Beach, they are designed for the kits from Monogram, Revell and Kinetic, this maybe demonstrates that this new mould is not so different from that of its older counterparts, at least for the air inlets anyway.

If like me you decide to build the aircraft with folded wings, the first parts of wings have to be stuck to the fuselage, but it is necessary to rework completely the first part of the hinge with the plastic card, some modellers use a brass tube, but the plastic will allow for finer detail and more scale accuracy, attention must also be given to the joints which appear when gluing parts (B6, B3, B5, B4).

Part G19 which is the belly of the plane is last to be placed, it also includes the wheel wells and care in fitting is needed as the joints run the length of the aircraft.

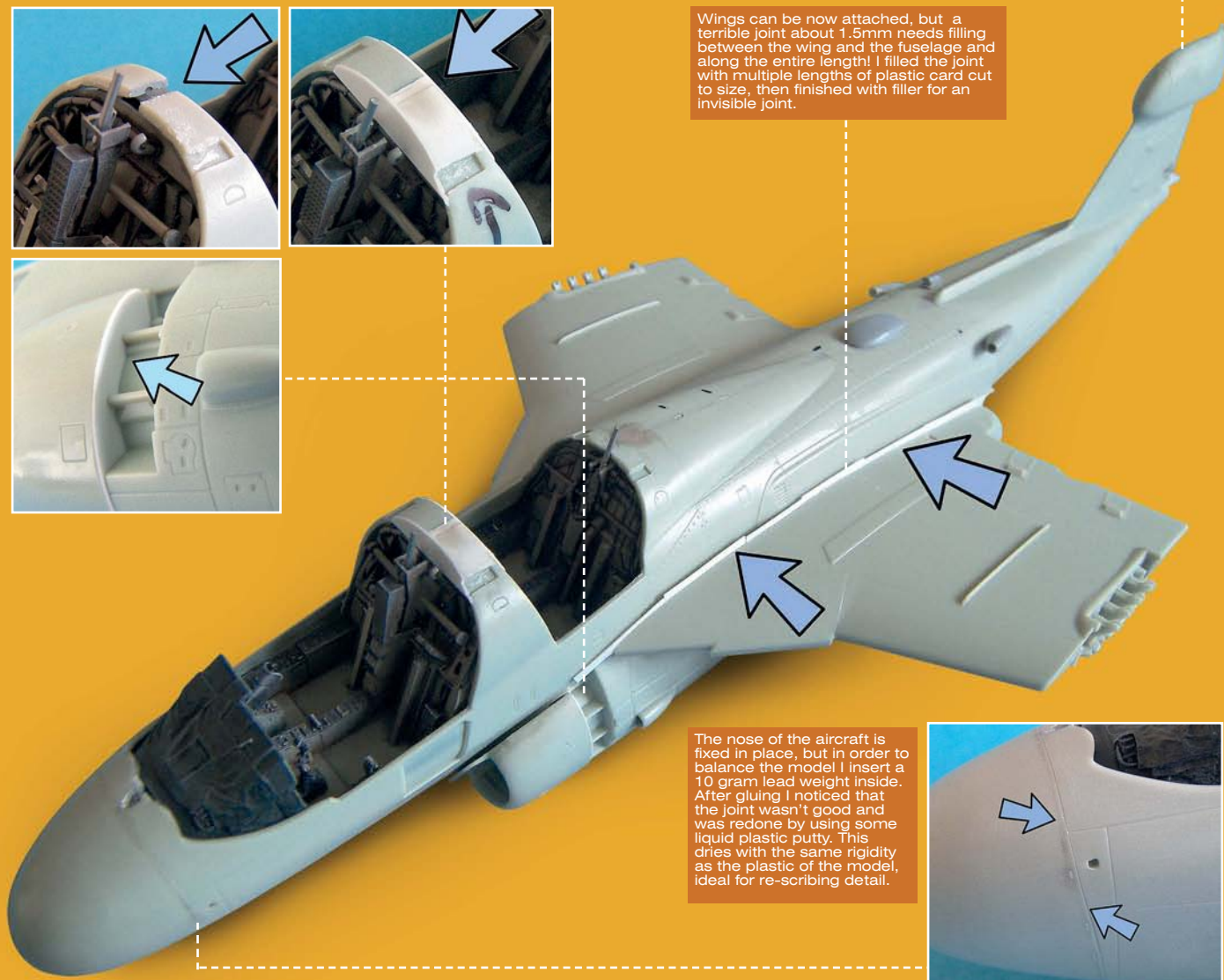
Many of the smaller details like the antennas are not used, respective holes are all filled and resin replacements were glued on cleanly using cyanolite. Attention is needed in finishing around the area where the antenna D10 mounts to the kits.



I decided to use the resin set from Wolfpack (ref 48081) which is intended for the Monogram kit, it includes all the antennas, the pod ALQ-99, and also a new tail POD which will not be used for this kit as it is the wrong type.

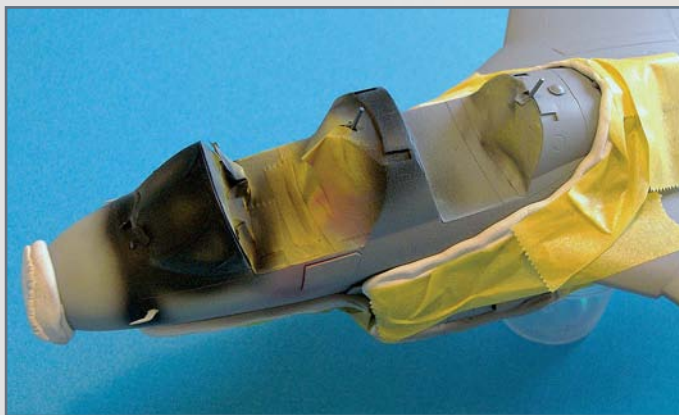
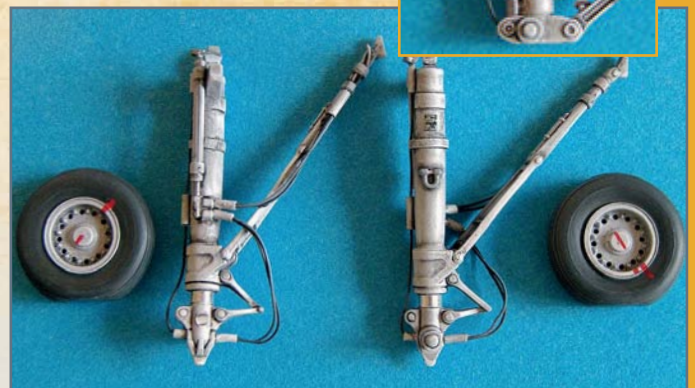
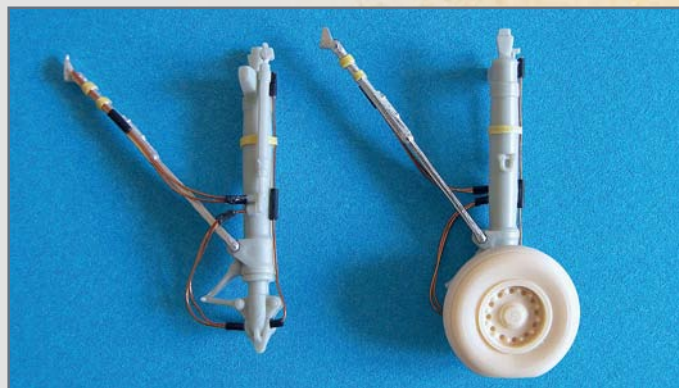


Wings can be now attached, but a terrible joint about 1.5mm needs filling between the wing and the fuselage and along the entire length! I filled the joint with multiple lengths of plastic card cut to size, then finished with filler for an invisible joint.



The nose of the aircraft is fixed in place, but in order to balance the model I insert a 10 gram lead weight inside. After gluing I noticed that the joint wasn't good and was redone by using some liquid plastic putty. This dries with the same rigidity as the plastic of the model, ideal for re-scribing detail.





The grey used here is FS36622, this stage is a little delicate because it is necessary to pay attention on the antennas which are already stuck in place, several masking tapes are used, of 1.5mm and 3mm to create something appropriate. The result is worth it. Air inlets must also be painted in midnight blue to match perfectly with decals, after weathering and a coat of varnish the match is good.

LANDING GEAR

I had decided to buy metal replacements for the landing gear from Scale Aircraft Conversions and used a mixture of these and kit parts. Once I had the basis of the landing gear complete I continued by detailing with brass wire and the plastic sleeve from electrical flex to create the brake wiring. The book "Detail and Scale n°46" is a great reference for the location of all the hoses.

Paint is then applied, a black primer, white, then a black wash. Detail painting can now be done and the jacks of shock absorbers are made in "Bare Metal" foil for a realistic shine. The wheels are from "Royal Resin" and are beautiful, these undergo the same paint treatment, while the tyre is painted using Revell's "black tire".

PAINTING & DECORATION

I chose to make an aircraft of the VAQ-136 based in Atsugi, Japan. The decals from Superscale will be suitable but hold some surprises which we shall see a bit later in the painting stage. The paint scheme is a typical U.S. NAVY camouflage in 3 tones of grey.

I first paint the belly and the nose in FS36375 (light ghost gray) the top of the aircraft is painted using FS36320 (dark ghost gray), the top of the tail and the front of the aircraft (from the nose up to the back of the cockpit) are painted in FS35237 (English grey), and the demarcations of this camouflage were defined with 'White Tac' putty.



The glazing supplied in the kit as two parts are very fragile, special care is recommended. A coat of 'Klear' will erase any the scratches/blemishes caused in the box, they were then painted on the inside with a mixture of 70% translucent orange paint, 10% Smoke and 20% of alcohol to reproduce the effect specific 'Iridium' of these windows. The obtained effect is convincing knowing that this reflection is very hard to reproduce in paint, but I am happy with it.



The ALC-99 pod in resin is used rather than those of the initial kit, better shaped and detailed with propellers in photoetch, they are also painted with two greys, the top in FS36320 and the bottom in FS36375.

Once the painting was finished, I decided to tackle the tail of the aircraft and its magnificent decoration. The decals from Superscale are not very accurate at all, they are too small and the antennas do not fall in front of the planned holes, I was thus obliged to paint everything myself. This is a delicate stage, it is necessary to find an accurate red that matches the supplied decals. The Italian red was found in the form of P085 from Prince August.



The tail is first masked along with the 2 antennas using tape in several very fine sizes. Firstly, a coat of matt white is applied, then the white stripes are masked referring to the decals, I precisely cut these masks with a fresh scalpel blade to get a nice clean edge, then the red coat was applied.

Once dry we can remove the masks and see the result, the fine black stripes are created using spare decals, the various elements are then placed after a good coat of varnish, the effect is much more appropriate, cleaner and more realistic, and painting has also helped to preserve the engraving which would have been partially filled with the thickness of the decals. One coat of matt varnish is applied to seal our beautiful decoration! The result required time and patience, but in the end worth it.



FINAL TOUCHES

Once decals are all in place a sealing coat of matt varnish is applied, after a long drying of 24 hours, we can begin weathering. I used the wash "DarkWash" from MIG Productions, this was applied first to all of the smaller elements, then the main body of the aircraft.

MIG washes are very easy to use and can be adjusted up to 24 hours later, so if a section does not suit you, it can be cleaned with thinners and can be attempted again, easy as that! It is necessary to apply this wash in the panel lines which spreads only by capillary action after a drying time of around 30 minutes I simply wipe over with a make-up remover pad soaked very lightly with white spirit in the direction of air flow across the aircraft. I obtained an appropriately clean plane and without over doing the weathering, various panels are individually handled to be lighter up or on the contrary made slightly darker. Once this operation is completed, a very light brush with pigments, both white and rust colours on certain parts of the aircraft indicate trails left by warm gases and lubricants.



The undercarriage is stuck, they fitted perfectly in the correct positions. Attention on the other hand must be paid to the alignment of the underwing pylons and stores. Engine intake covers were fitted along with the nose pylon. The assembly of the folded up wings is a little more boring and it is necessary to be patient because the task proves to be especially delicate, that is why it is absolutely necessary to undertake this task last of all and once stuck in place - do not touch them any more!

I added smaller details like the "Remove before flight" labels using offcuts from Eduard photoetch, and made a simple base to complete the model.

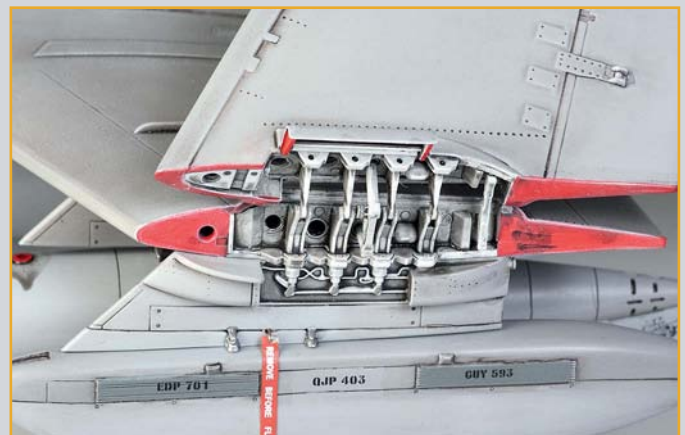


VAQ-136 "GAUNTLETS"

NAF Atsugi, Japon

CONCLUSION

Having surprised us with the release of the Hawkeye in all its versions, Kinetic have brought out a very beautiful kit, but maybe a bit too quickly and I found the overall quality effected by this. Certain assemblies deserved to be a little better on reflection. However, when compared with the ageing Monogram kit we're very grateful and I would recommend it to anyone looking to build this great looking aircraft.







Tupolev SB-2 Katyusha

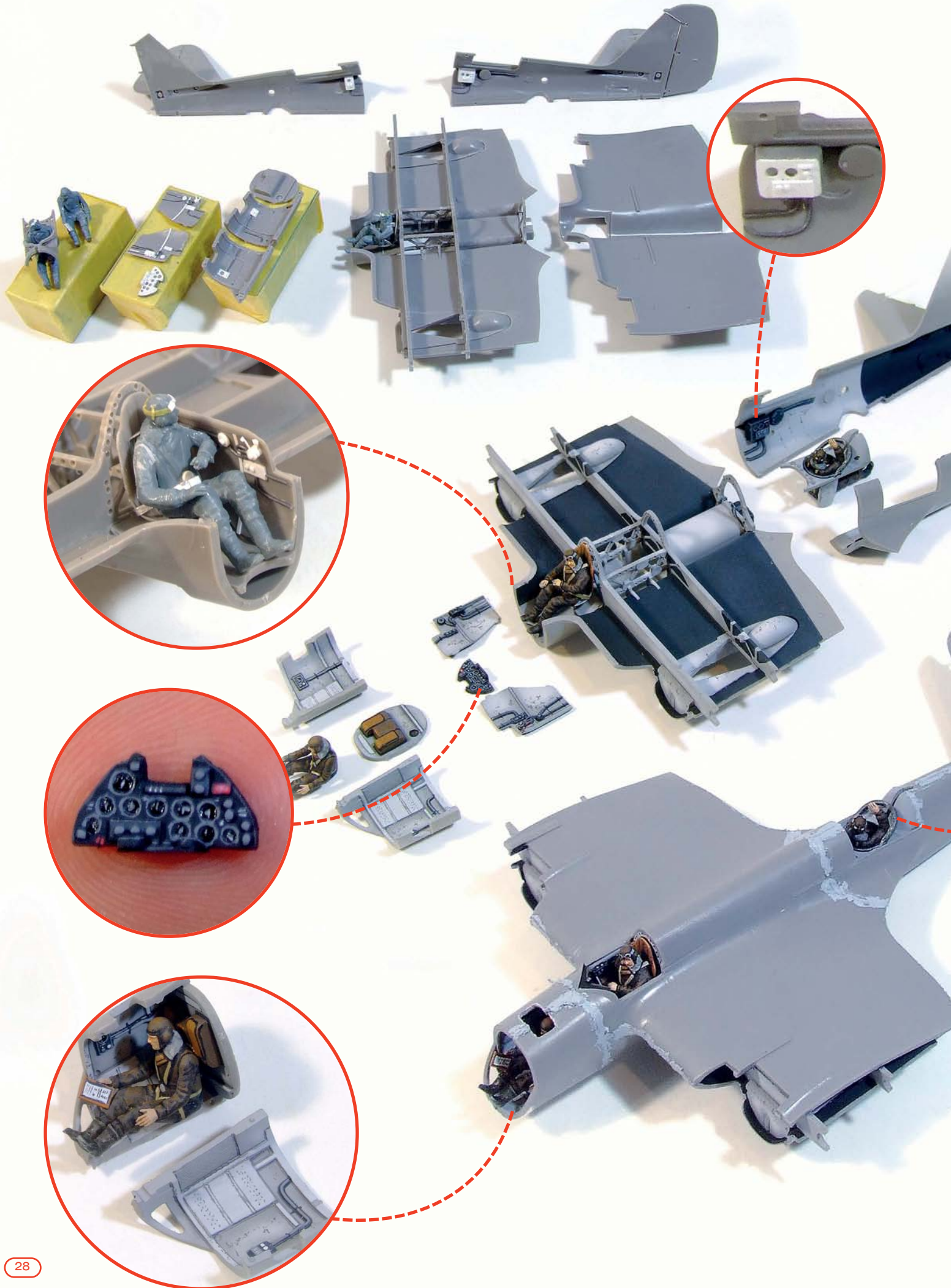
The slender lines of this plane made it particularly fast, even quicker than many of the fighters of the era as many of these were biplane designs. Its baptism of fire was like many aircraft of the era, in the Spanish Civil War. This conflict was a real testing ground for many aircraft of the time and of course the Russian bomber was one of the most influential players. The Spanish arrival in the skies was a novelty because despite being a bomber it was unreachable for the biplane fighters of the German Condor Legion operating Heinkel He-51 biplanes and the Italian Aviation Legion with FIAT CR.32.

The advances in technology forced Germany to start to equip the Legion with the most modern and advanced aircraft like the Messerschmitt Bf-109, Heinkel He-111 or Junkers Ju-87 Stuka. With these German aircraft in the sky, the losses of Tupolev SB-2 increased but the Russians responded

by sending in turn to the fight the Polikarpov I-16 "Fly" fighter. The end of the Spanish war meant that many of the aircraft survived the war to remain in the newly created Spanish Air force but due to lack of spare parts and the beginning of World War II the aircraft that remained soon fell into disrepair. At the start of WWII many more modern Tupolev bombers served with the Russian Air Force but as I mentioned earlier, these aircraft were already outperformed by the Germans and became relegated to second-line units. We should not however underestimate the part played by this bomber in the history of Russian and Spanish aviation.

**Daniel
Zamarbide
Suárez**
adds some
personal
touches to
the ICM kit

1:72



The design of the Tupolev SB-2 was one of the most advanced of its time in the Soviet Union and the rest of the world. It was a medium bomber with three crew, bomber-navigator, pilot and gunner.

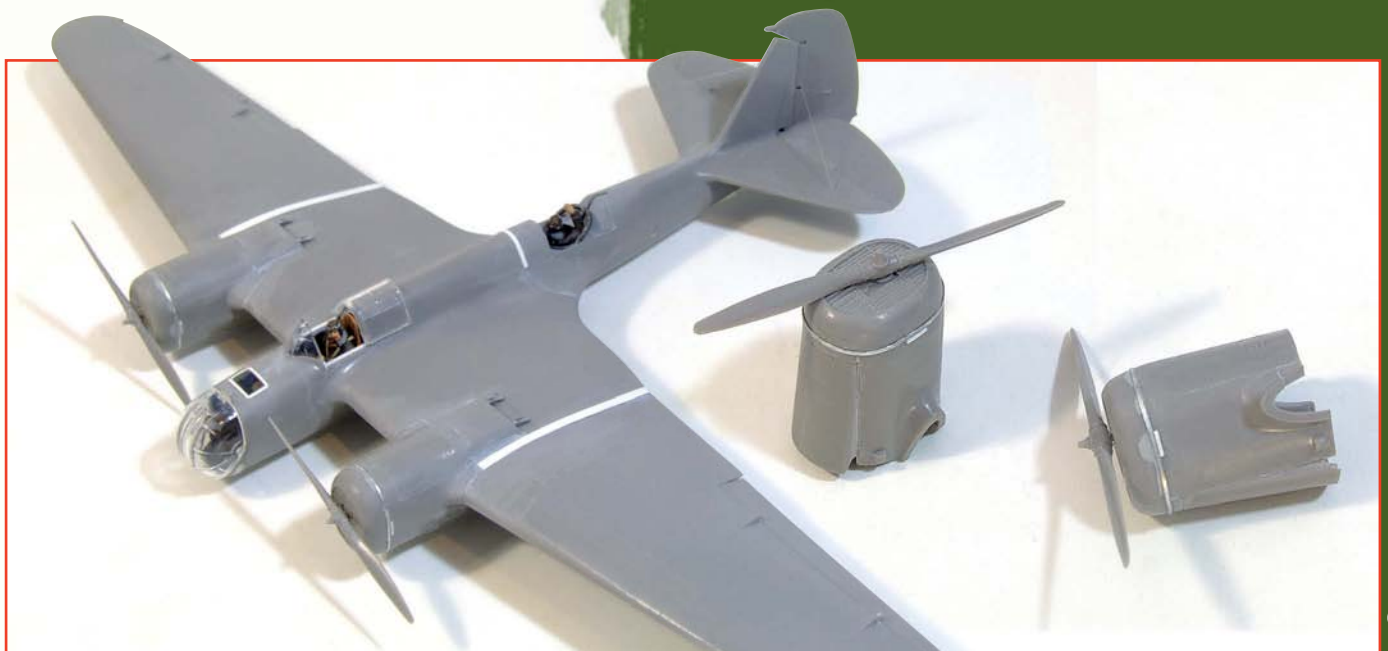


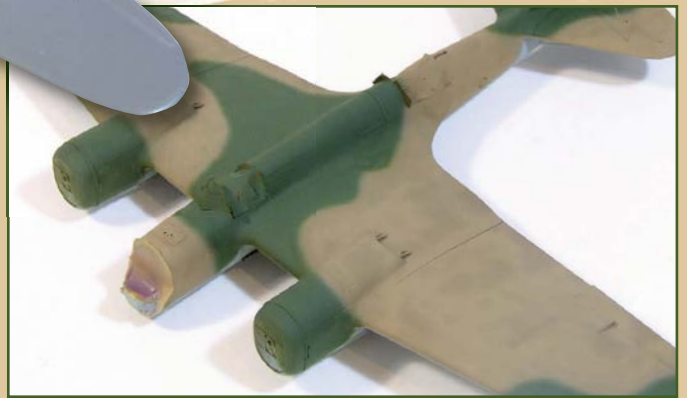
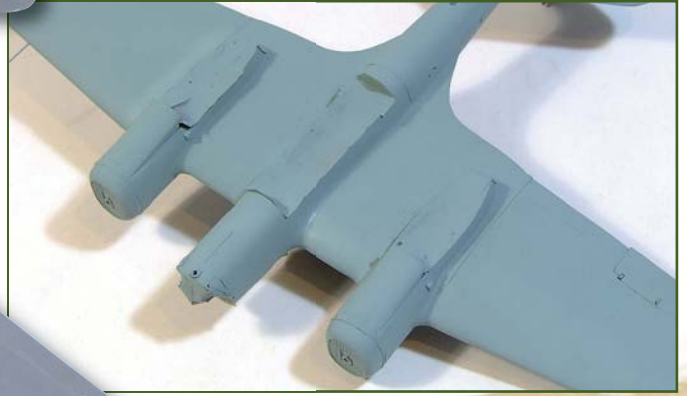
The Kit

The kit I decided to use was the Russian brand, ICM 1:72 scale kit. When you open the box you get a pleasant surprise with the quantity and quality of the parts, in fact, the engraved panel lines and rivet detail are some of the finest I've seen. Assembly is somewhat complicated, especially since the aircraft is composed of 5 parts making the fit between them complicated. I always start my models around the cabin. The parts for the interior are very complete and well-defined for the scale. Personally, I always like to include figures in aircraft builds and I feel this adds life and lends a sense of scale to the model. I used a set of R.A.F. figures. Revell provides about 20 figures in different positions that give much flexibility when you put them in the cockpits of airplanes. With the British pilots I had to make minor modifications to suit Republican pilots of the era of the Spanish Civil War. The bomb aimer figure in the nose of the plane was the most difficult, because of the confined space he had to fit into. The rest of the pieces that make up the cabin and the other positions of the plane are enhanced with further details using evergreen rod, copper wire and tin and some other minor equipment.

The Interior

I begin the painting phase. To do this I started with a base coat of light grey Tamiya XF-19 and finished the whole process with brush painting small details with Vallejo paints. The rest of the interior were not problematic except for the placement of the gunner in his rotating machine gun ring but with a bit of work he fits perfectly. The figures are always come with very rigid positions which, if we can modify those poses for more dynamic ones will always bring a little more realism to the aircraft once completed. And this is where the problems begin to appear with fit problems. The five parts used to assemble the airframe have serious flaws in the fit between them and top it off, the engine nacelles have a worse fit at their junction with wings. All joints of these parts require the use fillers and putty. Obviously this leads to long sessions of sanding to get the best joins and transitions between the different parts but this in turn has erased the panel lines and rivets because of their fine definition. Finally with the aircraft was fully assembled and ready for the painting phase which started with masking all transparent cockpit and gunner positions.

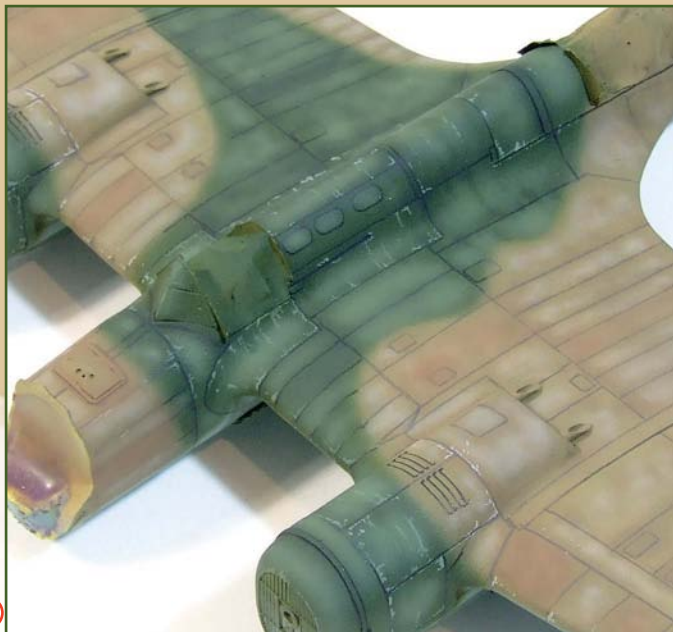


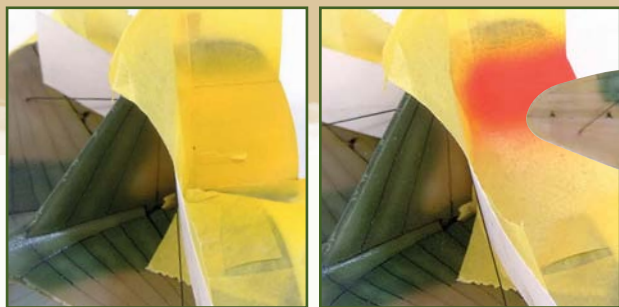


The Painting

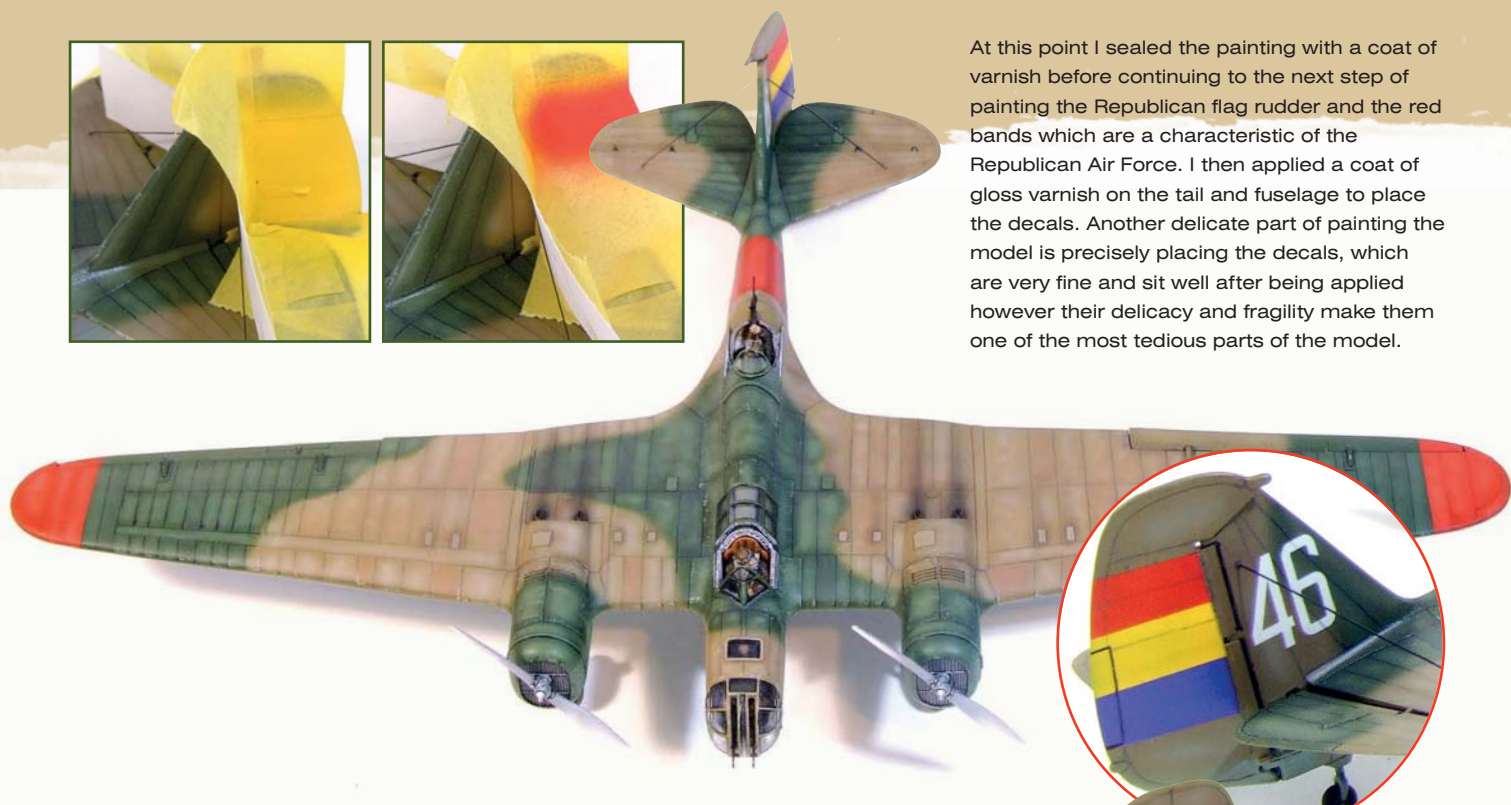
The first layer is always paint the lighter colour, in this case, the light blue/grey of the underside and then moving on to the top with sand colour and ending with the green. I quickly applied the colours to draw the outline basis of the camouflage and once dry, and more 'in tune' with the airbrush, I outlined the colours until they were completely well defined according to the scale of the aircraft. Once the paint dried, again I came across a new problem which is that the painting had covered by 60% the detailed panel lines and rivets which, with the help of a metal ruler with pencil, were drawn in. Obviously once all these lines were marked the contrast with the rest of the plane is very strong so the next thing I did is mix the

base colours of the camouflage with some white and from the centers of the panels outwards I applied the paint so as to fade each of the panels. This strong contrast should not worry you because the next step is to reuse the base colours of the camouflage, darkened and extremely diluted with alcohol and worked over again with the airbrush the panel lines. The whole process was repeated several time to build up marked contrasts between panels with very lightened and very darkened panel lines, before softening it all over again with the base camouflage colours thinned with a ratio of 10% of paint and a 90% of alcohol.

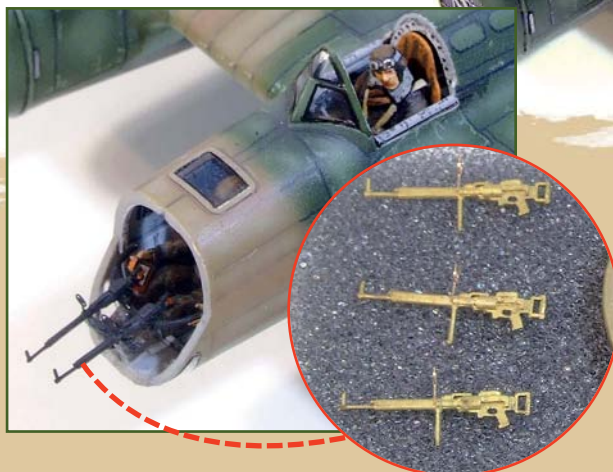




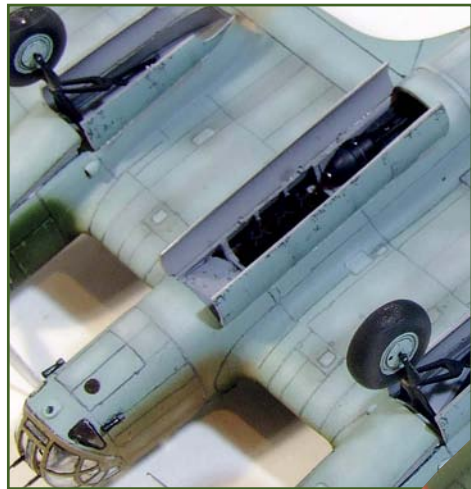
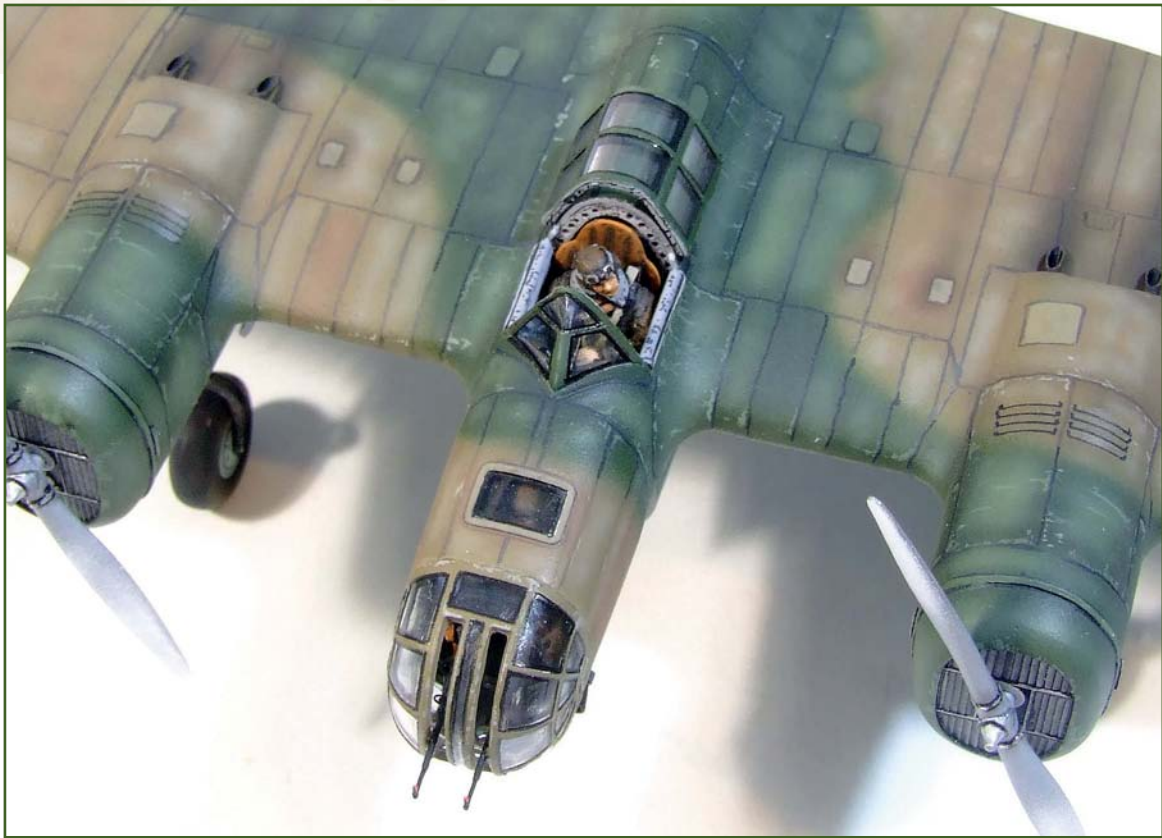
At this point I sealed the painting with a coat of varnish before continuing to the next step of painting the Republican flag rudder and the red bands which are a characteristic of the Republican Air Force. I then applied a coat of gloss varnish on the tail and fuselage to place the decals. Another delicate part of painting the model is precisely placing the decals, which are very fine and sit well after being applied however their delicacy and fragility make them one of the most tedious parts of the model.



At this point there are only small parts such as landing gear (very fragile), propellers, wheels and weapons left to finish. The weapons are of high quality and turned in metal from Ukrainian manufacturer Word Mini.



The hardest part of this phase is the placement of the weapons but when patiently placed these can be done without problems. Final touches included assembling all the bombs and placing small parts such as propellers, landing gear, wheels and so on.





Tupolev SB-2 Katyusha

This model is dedicated to my good friend
Tomas de la Fuente and all his wonderful family.

Obviously with the comments throughout the article is clear that the conclusion of this kit is that it is a model that is quite demanding of the modeller during construction. The modeller is faced with a number of problems with joining the different sections requiring care if you want to move forward. It is true that once a model is done it is one to be proud of, but definitely not an easy model. This detracts from the quality of the kit, its details and the fact that it is one of those planes that are rarely seen, and therefore one to have in our collection and a change from the regular German, English, American or Japanese subjects. My advice would be to work slowly with another model at the same time which you can switch to relieve any stress! Obviously it's a plane that can give us a lot of options with multiple choices of Russian, Romanian, German ... versions as well as winter ones with skis or alternative armament configurations.



Accidental Eindecker

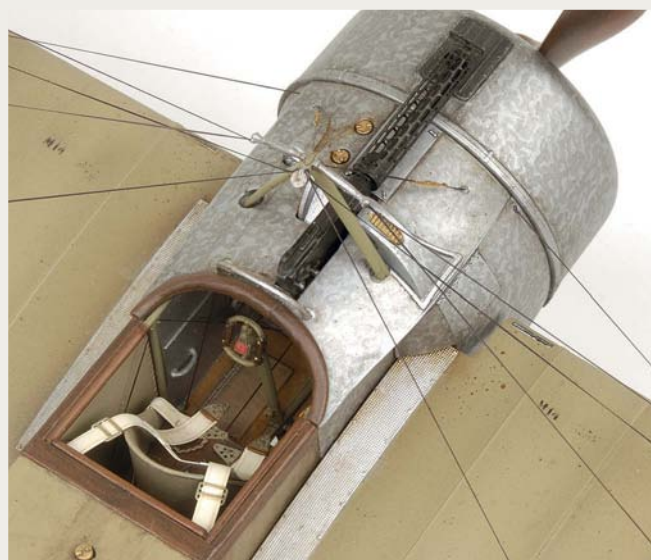


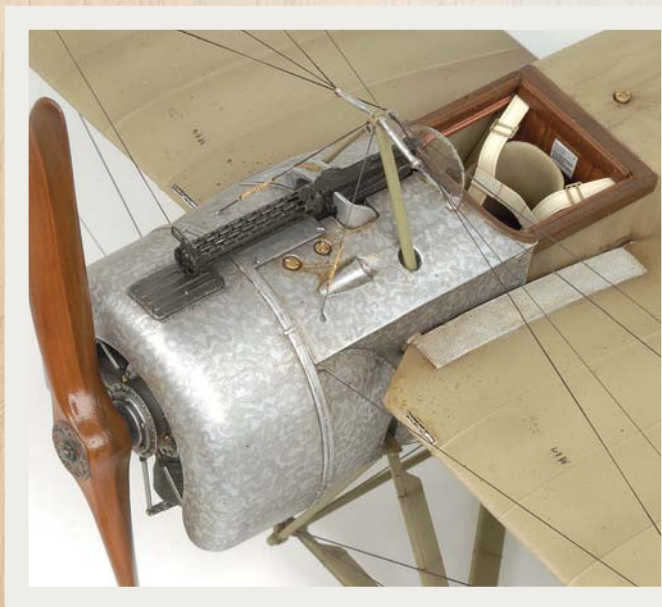
**DAVID PARKER BUILDS
WINGNUT WINGS 1:32 FOKKER E.II / E.III EARLY**

Sometimes you just can't help yourself! Certain kits have you clearing your bench and starting to build before you realise fully what you are doing. This is one of those, I casually trimmed a few pieces and found myself accidentally building an Eindecker.

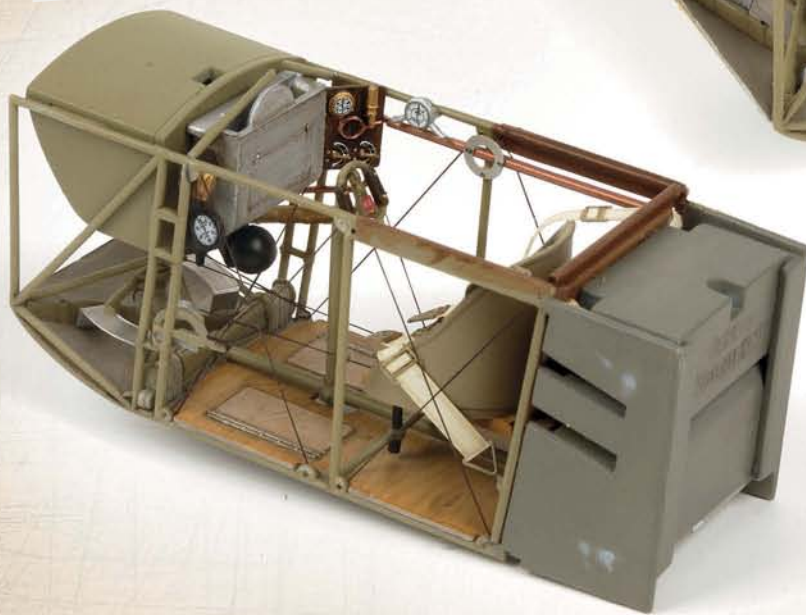
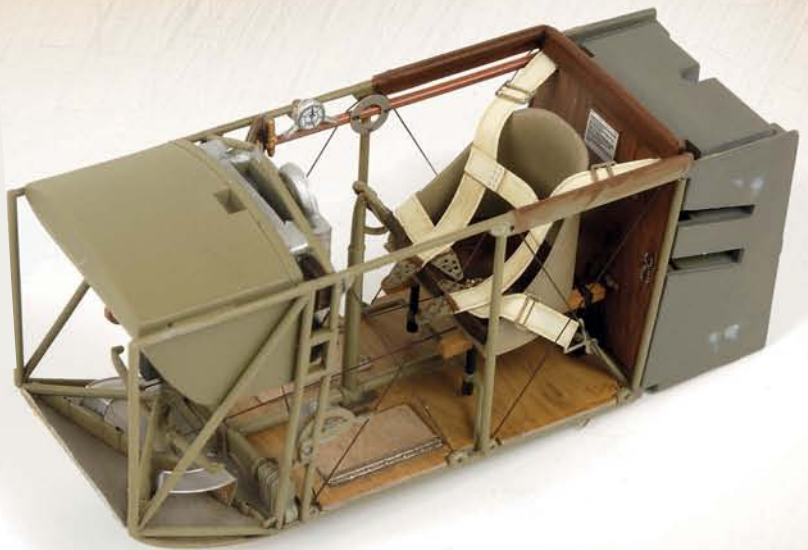
In mitigation the crisp sprues will have your creative juices flowing and it looked like, and proved to be, a simple project and apart from the rigging its all in the box. I also relished the challenge of the metal finish on the cowlings so it seemed like a perfect quick project.

Exact engineering is always a feature of these kits making them a delight to assemble and although they demand for more pre-painting of parts than most aircraft builds I really like the challenge of the different finishes, the wood, metal and fabric that these offer. With the exception of the turnbuckles my kit was built from the box and I did make a few unforced errors mostly from my excitement to move things on before considering the best approach.



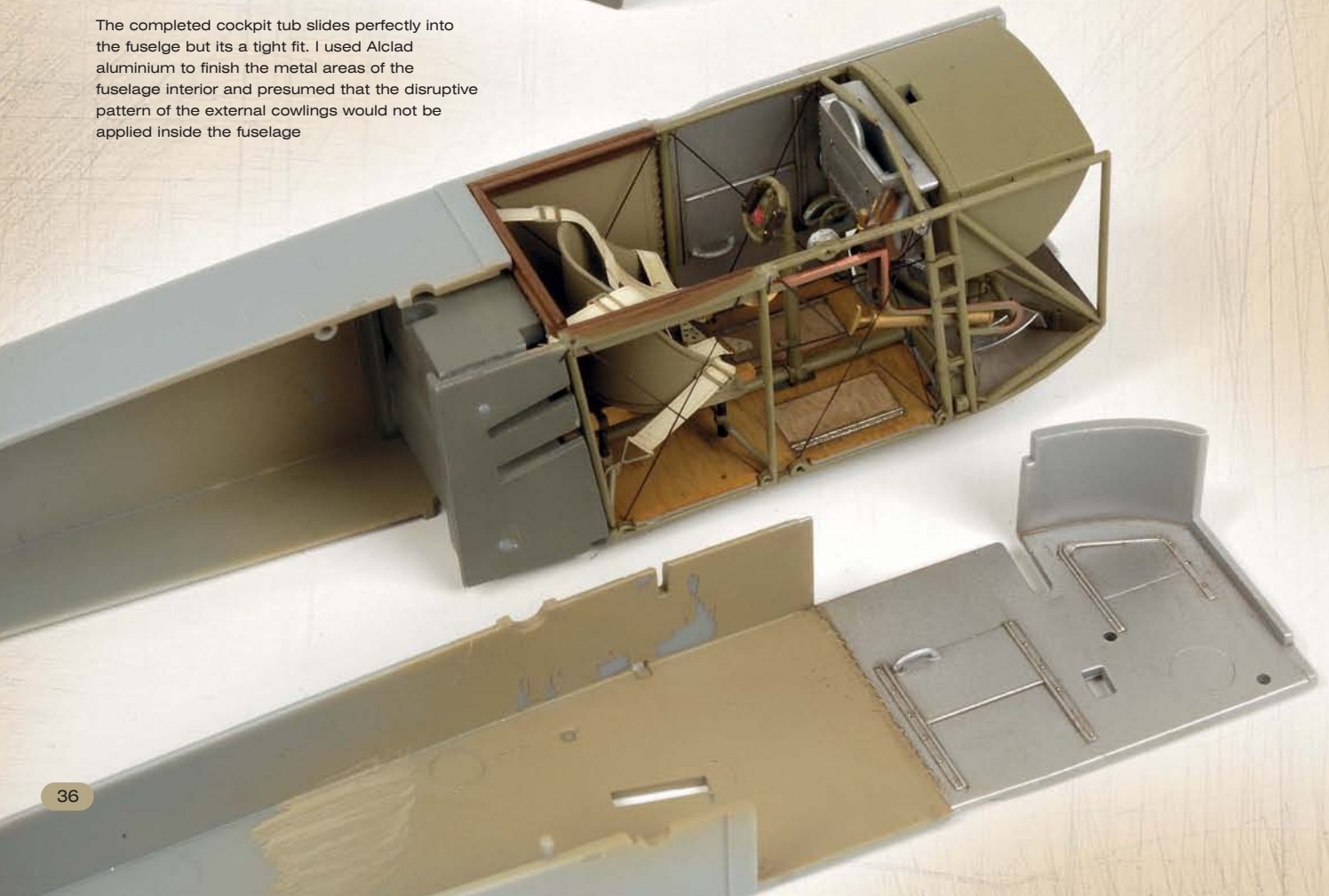


FOKKER E.II



The cockpit tub is a cleverly designed assembly and a mini project in itself. There is plenty of detail and the only things that I added were the rigging wires and rudder control cables which were added using EZ Line, a fine elastic thread which handles really well. The wooden floor panel and bulkhead were each sprayed in a light and dark wood base tone respectively. The woodgrain patterns were then brush painted using slightly darker tones of the base colours and were then flashed over with some Tamiya transparent orange for a varnished look. The Fokker green of the metal framework was a matter of guesswork on my part so I used Lifecolor RLM 02 UA504 mixed with about 15% Olive Drab Green Tone UA427. The photoetched kit seat harness was bent to shape over the seat prior to being painted

The completed cockpit tub slides perfectly into the fuselage but its a tight fit. I used Alclad aluminium to finish the metal areas of the fuselage interior and presumed that the disruptive pattern of the external cowlings would not be applied inside the fuselage





Tolerances are very fine and I found that I had a small gap in the fuselage just behind the cockpit, no doubt due to my less than precise assembly of the tub. A little sanding down of the fuel tank and the outer edges of the tub fixed the problem and closed the gap.



The cowling parts were polished with sanding pads and sprayed with Alclad aluminium.



I did some tests to see how best to replicate the disruptive finish on the aluminium and found that brush painting Mr Metalcolor Chrome Silver gave a very convincing result. The kit provides excellent reference photos of the real finish which can be used to copy the random pattern.



The brass ammunition belt and oil caps were picked out in Mr Metalcolor Brass and Stainless was used for the gun shield on top of the cowl.



The fuselage was sprayed in Vallejo German Camouflage Beige 70821 and the oil stained fabric closest to the engine was airbrushed with some darker tones. The stains were then worked over with darker acrylic colours working onto a wet surface and also using some oil colours.



The decals were applied and the grimey finish on the cowlings was added with oil paints, at this stage the front cowl was not fixed to allow the engine to be added.





The tarnished metallic finish on the cowlings was achieved using a mix of MiG Productions Shadow Brown and Faded Grey oil paints.



Early aero engines threw out a lot of oil so I liberally spattered the firewall behind the engine, MiG Productions Engine Grease, dragging a wet brush out from the centre followed by spattered paint over this.



The engine was sprayed with Alclad Aluminium and the other colours added with Mr Metalcolor shades. This is before any weathering was applied.



My only addition was the spark plug leads on the back of the engine although they are only really visible from the underside. You can just make out the joint lines on the cylinders which I think are best left alone given the finesse of the fins.



The installed engine with MiG Engine Grease washes applied.

By now it was time to fit the undercarriage which assembles beautifully and plugs into the fuselage for a really solid result.



FOKKER E.II



The wings were painted in the same shade as the fuselage and the massive decals applied. It took a few applications of Mr Mark Softer to seat them over the fine wing ribs. I used Tamiya Smoke to shade the ribs with a Post-it note acting as a quick and effective mask.



The finished wing with the shading and the walkway finished in Mr Metalcolor Aluminium.

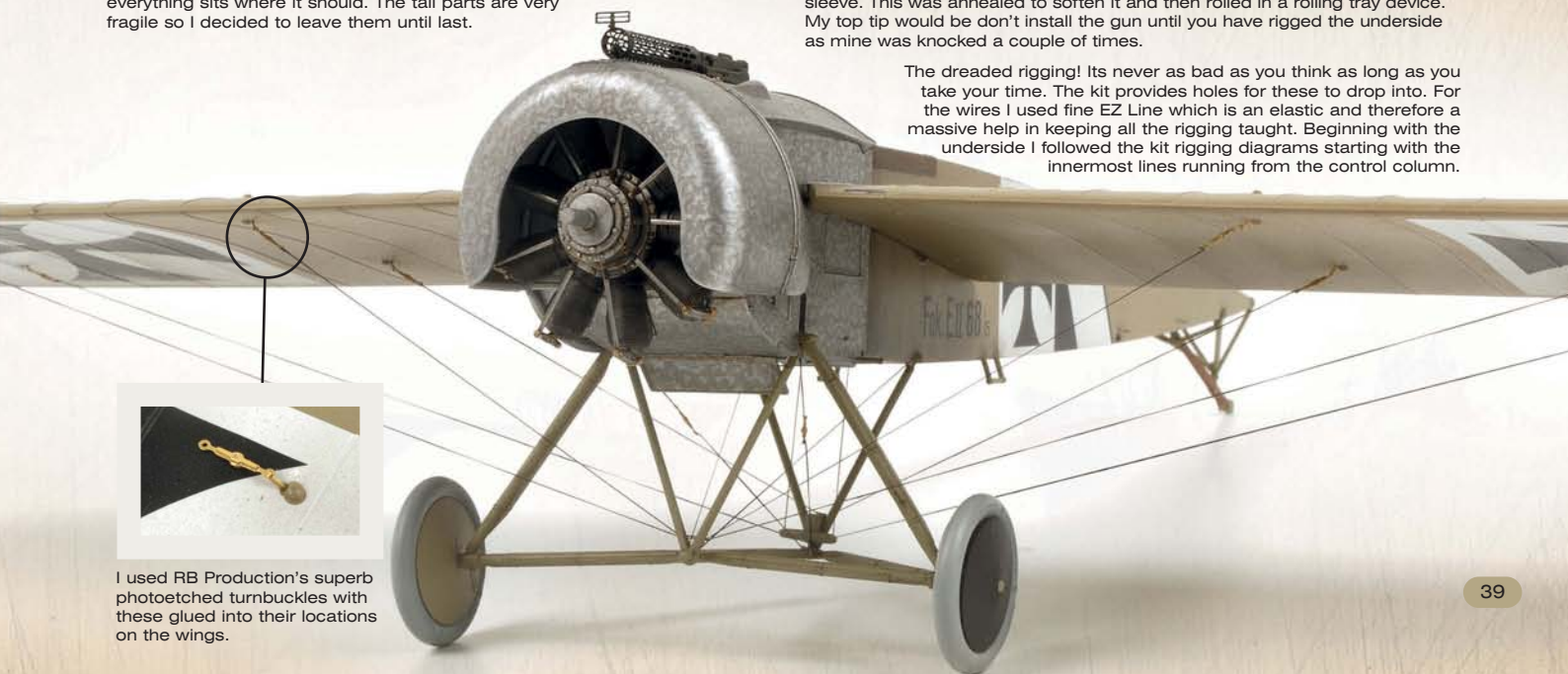


The wings in position, the fit of the tabs is quite tight but it means that everything sits where it should. The tail parts are very fragile so I decided to leave them until last.



Following the instructions I assembled the Spandau using the kit photoetched sleeve. This was annealed to soften it and then rolled in a rolling tray device. My top tip would be don't install the gun until you have rigged the underside as mine was knocked a couple of times.

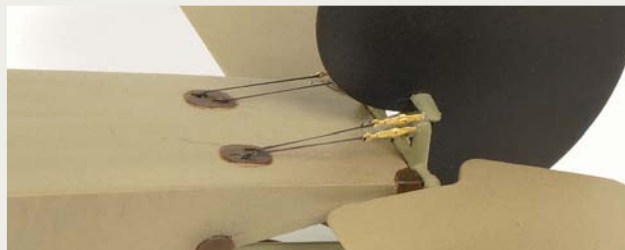
The dreaded rigging! Its never as bad as you think as long as you take your time. The kit provides holes for these to drop into. For the wires I used fine EZ Line which is an elastic and therefore a massive help in keeping all the rigging taught. Beginning with the underside I followed the kit rigging diagrams starting with the innermost lines running from the control column.



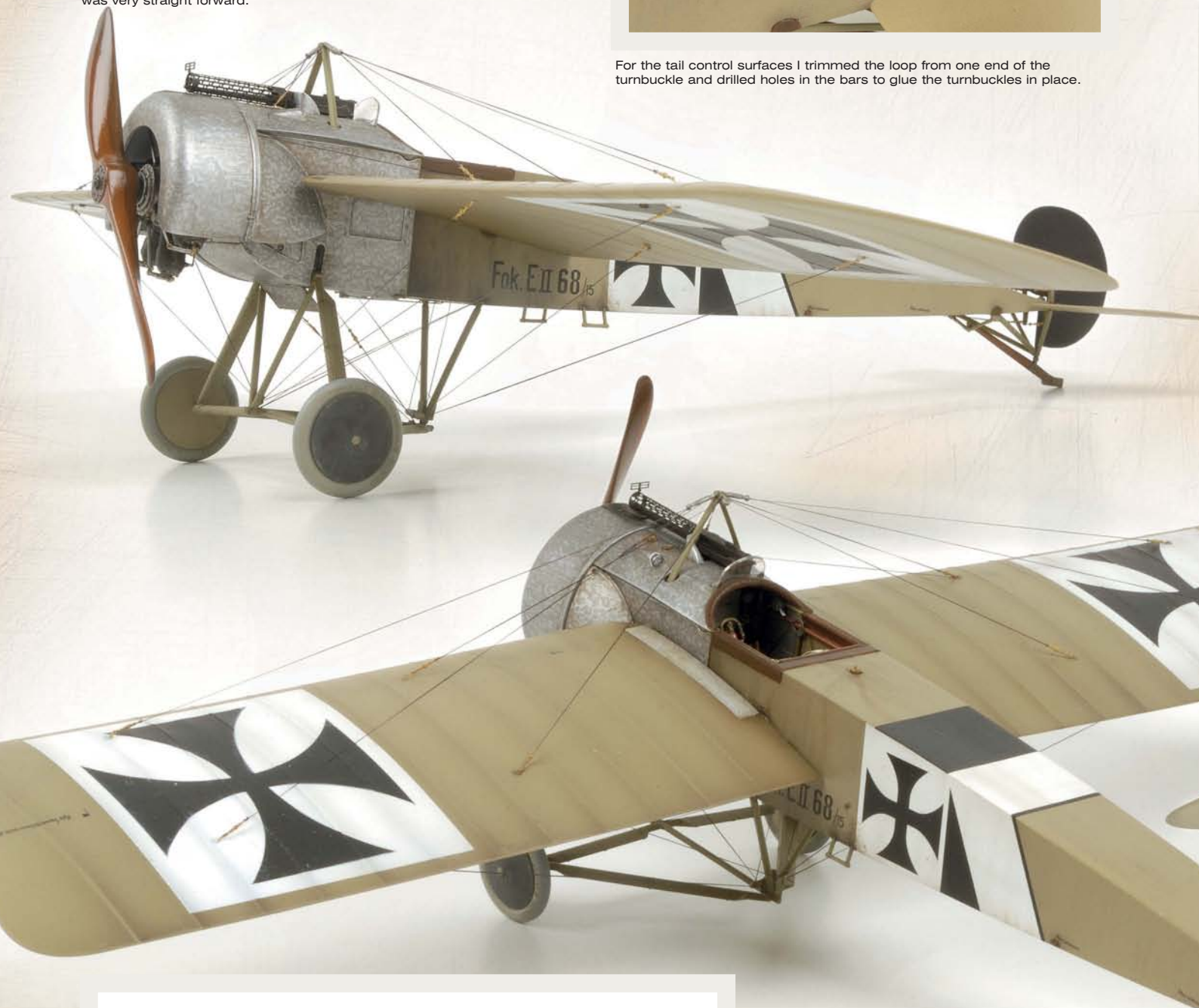
I used RB Production's superb photoetched turnbuckles with these glued into their locations on the wings.



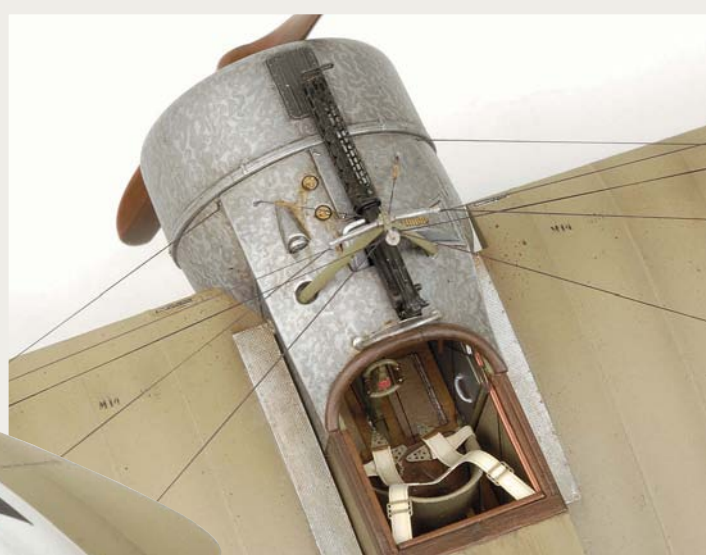
Here is a stage I wish I had handled differently. I fitted the 'A' frame to the fuselage before adding the rigging wires. Much better to fit the twin wires when the frame is separate and then fit to the cowlings. The topside rigging was very straight forward.



For the tail control surfaces I trimmed the loop from one end of the turnbuckle and drilled holes in the bars to glue the turnbuckles in place.



The prop was sprayed with Lifecolor Wood Warm Base and the darker lower section was brush painted. Using a wide flat brush the woodgrain pattern was dragged over the light area using an intermediate shade. This picture shows the propeller at this point. Next it was sprayed with a mix of Tamiya transparent Orange and Yellow and then sealed with a coat of gloss varnish.



With the final topside rigging in place it only remained to paint the propeller and fit the tail components. Take care when removing the elevators from the sprue as I managed to snap the connecting rod on mine. They feature two tabs which cleverly slide into the back of the fuselage. Finishing touches were spattered engine oil on the windscreen and the wing leading edges as well as some staining on the wing root walkways. Humbrol 72 was used to wash the wheels and tail skid to give a dried mud look. I added an overspill stain running from the fuel tank filler down the fuselage and some oil streaks running away from the fillers on top of the cowlings.

This was a really fun build which I managed to complete in about ten days and I really couldn't fault the kit. Wingnut wings continue to impress and delight and their Fokker is no exception.



1:32 Scale Montex Resin Kit

YAKOVLEV YAK 1B





The Polish manufacturer **Montex** is well known for its vinyl mask range but it is perhaps less well known that Montex also produces full resin kits. This article looks at one of their 1:32 range the **Yakovlev Yak 1b**.

This aircraft type, as all the yak piston engine series, was used by the French squadron GC (Groupe de Chasse) n°3 Normandie. The name of the squadron coming from the French region where the famous D-Day landings took place. With the success of these free volunteers fighting in the USSR alongside Soviet forces, the group was allowed to add the Niemen name to Normandie, Niemen being a river. This Yak1 depicts the aircraft of one of the famous pilots of the group, Marcel Albert, 1st escadrille of GC3 in April 1943 at Polotniani-Zavod.

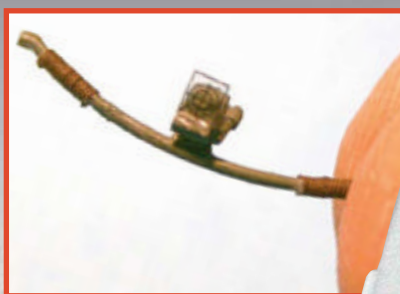
The kit is a 'full resin' type with 107 high quality parts, 4 clear resin parts, film for instruments, masks for painting the canopy and finally Techmod decals for a choice of three aircraft.





The surface details are very fine, rivets and fabric covered areas are subtle, well rendered and well cast.

I started with the cockpit construction, as common with most kits. The rudder pedals include six detailed parts and I added a strap made with masking tape, painted brown. The gun sight is supplied with a clear ring and glued to its curved arm support. The dials for the instrument panel are glued on the rear of the main panel painted black and looks very effective when finished.



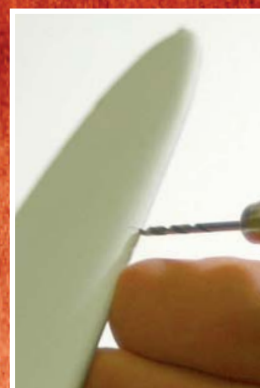
The consoles, seat and floor details are painted before assembly and all the buttons and knobs are painted red, white, black, or blue, according to the diagram and the rear cover of the AJ Press YAK1-3 book Issue 46. The parts are tiny so great care is needed, take your time as the results are worth it. The entire interior is painted grey (I used RLM 02, the closest colour I found). Once the seat is assembled and glued, the cockpit is inserted into the fuselage halves. The rear armour glass is placed on its support behind the seat and the cockpit is almost complete. The seat belts are not included in the kit, I used RB Products Sutton type harness. This multi-media set is better than photoetched parts with a more realistic sagged effect.



Landing gears are completed next, chrome adhesive film is glued to simulate the finish of the oleo tube and the rear gear is glued in place before the fuselage halves were joined together. A silver coat is sprayed to check irregularities along the joint and sanded where required. The other big assembly stage starts now with the fixing of the wings to the fuselage. To achieve the proper angle, a balsa jig was made with the fuselage positioned on it, then the wings are glued and allowed to set at the correct angle. Putty is required above and under the wings at the fuselage join but not too much as you can see from the photographs.

The underside radiator is positioned, thanks to pins and locating holes, and the propeller is assembled with the help of a new jig from cardboard with the 3 blades set at the correct angles and allowed to dry. Rivets on the forward radiator which disappeared during some sanding are re-engraved with a needle and a pitot tube hole is also made on right wing leading edge.

Ready for paint, the winter temporary camouflage is sprayed in white. The post for the pilot to check the retraction of the landing gear is made from copper wire and inserted in the wings, the exhaust pipes are also installed at this stage.



The main landing gears are now installed and a wire simulating the brake line is added. The painting stage here. As I said I chose a winter partially camouflaged Yak, as the red stars and numbers are very eye-catching, and I admit that I prefer this to the black/green camo scheme seen often on these aircraft. The decals are homemade; I reproduced the profile from a magazine illustration and printed the stars, numerals and the special squadron marking that Marcel Albert had painted on the aircraft he flew, it's a triangular white/red graphic from SPA 69 marking its D520 wore during the French campaign in 1940. The marking is on both sides of the fuselage, as seen on pictures and a film. The French roundel comes from the spares box (a 1:48 Mirage 2000).

day after, when fully set I fixed the opposite edge to the fuselage.

The weathering is done with pastel chalks and a Tamiya smoke wash diluted with water, running into the engraved panels. The diorama is rather simple. I built a 1:35 BZ-ZIS-5V Soviet WW2 Army Fuel Truck mod. 1942 from Eastern Express and the figures came from The Mini Art range Soviet Self-Propelled Gun Crew (ref 35037), and MASTER BOX 3529 Russian (Soviet) Infantry, 1944 for some parts. The refueling tube is made with electrical wire and the gas handle is hand made with plastruct sheet. The snow is simply a coat of plaster of Paris with Christmas artificial snow sprayed over.

The aircraft has canvas protectors over the wing roots. This protects the wood wings and would certainly help prevent the pilots and mechanics slipping on the surface in freezing conditions. I represented this by cutting very thin pieces of card and working from reference photographs.

The rear sliding canopy is not the resin part from the kit as the thickness does not allow this part to fit precisely over the rear fixed part, so I use a transparent acetate sheet and the painted frame is made from masking tape. I fixed it on one side, and the





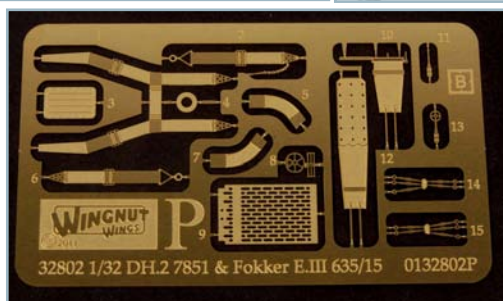
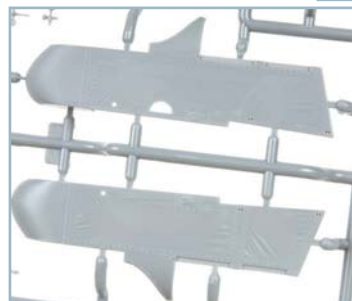
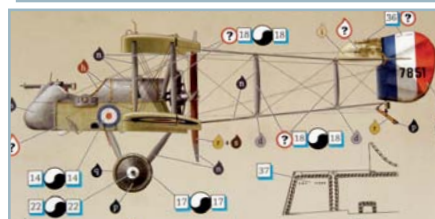
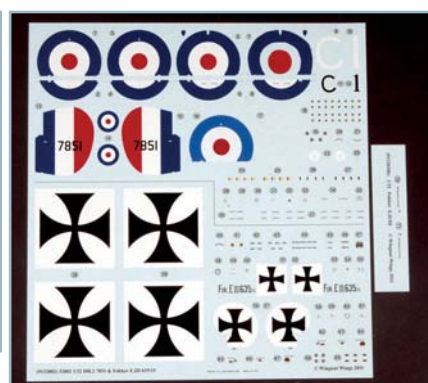
YAKOVLEV YAK 1B

I took great pleasure building this full resin kit. The quality is excellent and the adjustment and putty required are less than some injection moulded kits! I would recommend this kit without hesitation.





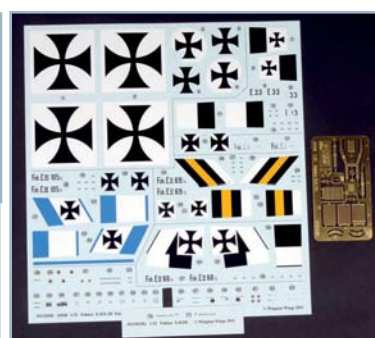
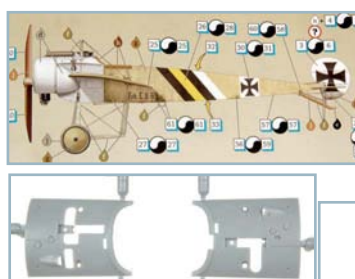
AIR RORN new releases



Wingnut Wings 1:32 'The Duelists' Fokker E.III & DH.2

We begin with a new and attractive double kit package from the undisputed masters of all things WW1 and manufacturers of some of the best kits you will ever hope to build, Wingnut Wings. The Duelists set which harks back to the Airfix 'dogfight double' contains two kits, a Fokker E.III and DH.2 and this set was released a few weeks ahead of the kits of the individual aircraft and offers a small cost saving over buying two individual kits. The large 'Pizza' sized box makes for a real sense of occasion with the two kits divided into individual compartments inside along with a single instruction book (instruction leaflet does not adequately describe it) and single photoetch fret and decal sheet. The difference with this duelist pack is that unlike the regular Wingnuts kits, this set only provides one set of markings for each aircraft, although these markings are unique to this set. The kits themselves are all that we have come to expect from the Wingnuts range, beautifully moulded with superb surface detail

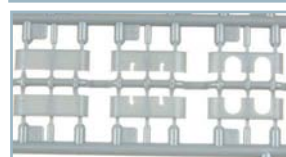
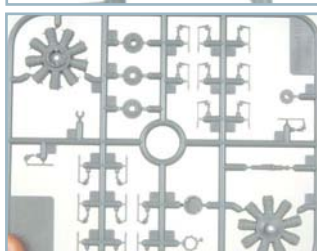
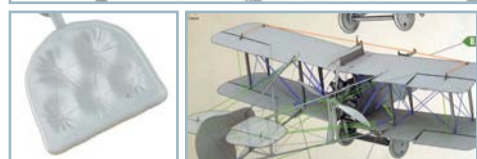
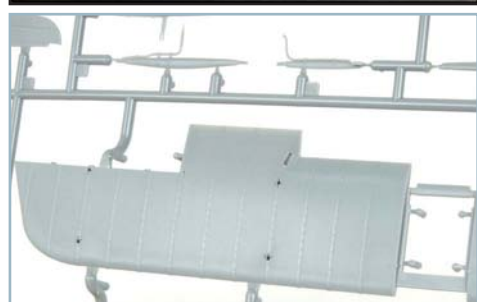
and the confidence of a superbly engineered fit. The Fokker is an updated production model with internal ammunition storage and wing mounted compass and comes with a superbly detailed cockpit with photoetched seat harness and only the bracing/rigging wires needing to be added. The relatively simple design of the Fokker means that this is an ideal subject for the WW1 novice with only minimal rigging required, all of which is clearly shown in the superb full colour instruction book. The compact DH.2 is equally good with superb wrinkled canvas sides to the fuselage tub and delightful whicker pilot's seat. Various optional parts are supplied but not used with the single scheme provided. Again the excellent instructions will guide you through with colour references throughout but the complex rigging will demand some persistence. A superb pair of kits and we really like this duelist package, its an exciting concept and we look forward to seeing how this range develops.



Wingnut Wings 1:32 Fokker E.II / E.III Early

Early or late, the choice is yours thanks to two new Fokker releases from Wingnut Wings and I have to confess that this one is the one I prefer if only because it offers the more colourful choice of markings and its the version that I have assembled for a closer look on page 34. There is a little more work to do with this one with the wing mounted compass having to be filled in and some clearance to be cut in the leading edge of the wing. On both kits you also need to remove the moulded protective panel on top of the engine cowling and replace it with a photoetched version, and a little pre-shaping of this piece is required to get a good fit. This version also provides the bizarre headrest for

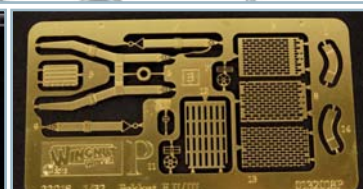
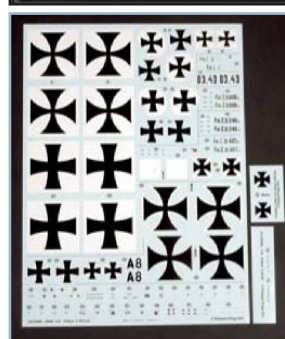
sighting the gun and a toy bear mascot. As with the Late version the cockpit is another triumph of detail and apart from rigging wires there really is nothing to add to the kit. The Wingnut Wings instructions are the best example bar none, combining coloured CAD generated views with period photos and with everything fully colour referenced you need know nothing about WW1 aircraft to build one of these kits. This kit provides a choice of Five different schemes and the excellent decal sheet provides everything you need right down to placards and dials and superb faded registration numbers.



Wingnut Wings 1:32 AMC DH.2

Fresh from its appearance in the Duelist set comes the DH.2 in its solo kit guise. The plastic parts here are the same but the instruction book is specific to this kit with additional photo references and of course detailed information and colour profiles for the five different schemes that are provided. Top quality moulding is the order of the day here and you cannot fail to be impressed just in examining the sprues. Construction begins with the fuselage tub which follows Wingnut Wings usual approach of providing a complete inner cockpit framework to plug inside the fuselage halves. Its an approach which works incredibly well and really helps during the painting stages, with colour guides on hand to show exactly how everything should look, you really cant go wrong! The Gnome radial engine is beautifully detailed and the sprues are shared with the Fokker kit so the alternative spark plugs need to be removed from the back of the cylinders. The kit

provides a choice of interplane struts and wingtop fuel tank design depending on your choice of markings. There is also a choice of fairings and gun mounts for the cockpit along with racks for the Lewis gun ammunition. A colour coded diagram is supplied to assist with the daunting looking rigging and photoetched turnbuckles are provided for the complex three way intersection of certain cables. The five colour schemes offer a good mix of the colourful with doped linen examples through to camouflaged 'Olive Green' PC10 aircraft. The Cartograph decal sheet is superbly crisp and precise as with all Wingnut Wings kits and it helpfully includes the saw-toothed white panel for the underside of the cockpit tub, something which would be very demanding to mask. Another superb release from the Wingnuts team and if you haven't built one yet you really are missing out.

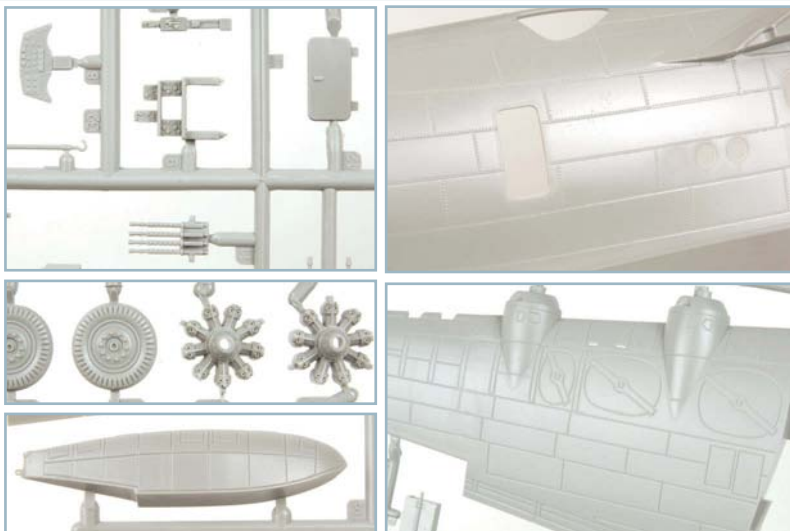
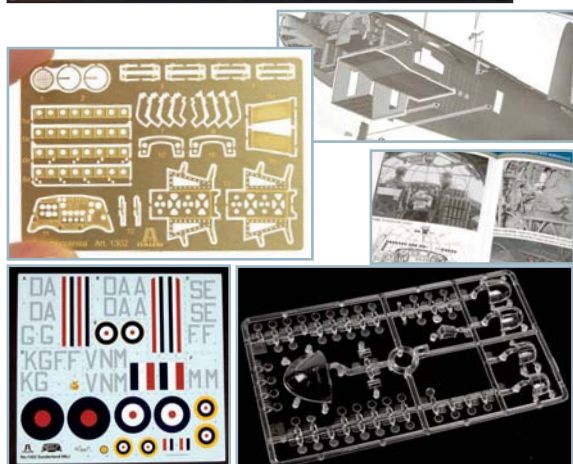


Wingnut Wings Fokker E.III Late

With two versions of the iconic Eindecker released by Wingnut Wings they naturally share many common parts and the real choice comes in the selection of markings. The uncomplicated design of the Fokker makes for one of less demanding builds in the Wingnut Wings range but there is still plenty of that lovely detail to get stuck into. The delicate framework of the cockpit is beautifully replicated and of course there are decals supplied for all the dials and instruments and some excellent photoetched seat belts. The cockpit tub is a complete model in itself which then plugs into the fuselage and experience tells us that it will fit inside perfectly too! The Oberursel radial engine is another superbly detailed assembly with fantastic individually moulded

push rods. The undercarriage has been cleverly designed too with interlocking struts which help you easily align the parts. The kit provides a choice of machine guns with both Spandau and Schwarzlose M16 for the Austro-Hungarian example. Photoetched barrel sleeves for the spandau are included but will need to be rolled by the modeller. Six different schemes are provided in the kit with colour profiles and period photos to help guide you and the Cartograph decal sheet is superb. Of particular note are the part-faded aircraft registration numbers for some of the schemes which look very convincing. Included in the six is a set of markings for Manfred von Richthofen's machine (not painted red!) which should be popular. Another top notch kit which begs to be built.

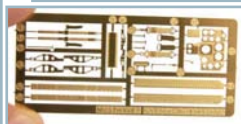
new releases



Italeri 1:72 Sunderland Mk.1

Certainly one of the most anticipated new releases this year and we think an excellent and long-overdue choice. Italeri have been stepping up their game with their new kits so the prospects for the big flying boat were good and Italeri have included one of their handy reference booklets as well as a nice photoetched fret too. The immediate impression of the kit is good but the surface detail may divide opinion. Italeri have rendered all the panel line detail along with some quite strong rivet patterns which tends to give the fuselage and wings a quilted appearance reminiscent of an ocean liner. The whole effect looks too much for the scale of the aircraft to my eye and I think the rivets are the problem. Photos of the real aircraft do not show the distinctive rivet patterns found on the kit. Inside the massive fuselage there is quite an extensive interior

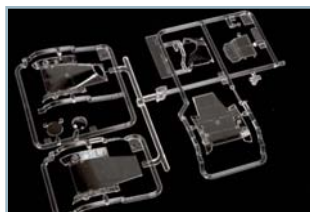
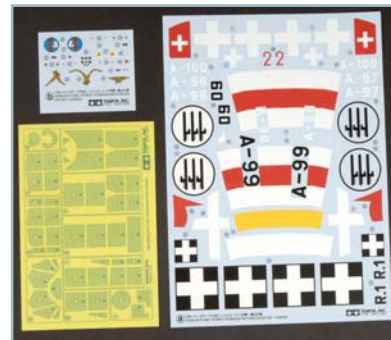
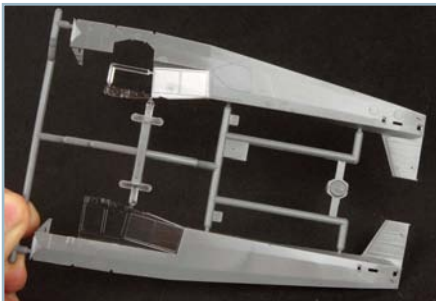
provided and the cockpit is extremely well detailed for the scale with photoetched seat frames, seat belts and optional instrument panel. Rib detail is moulded inside the fuselage but it is peppered with release pin marks, some raised, some recessed. The gun turrets are moulded in separate halves with basic interiors and the sliding nose turret can be modelled in either position. A set of wheels with tail trolley is provided and the sliding bomb racks with bomb load are also provided. Engines are typical of kits this scale but the pistons are really crisply rendered. The instructions are a new style with CAD generated shaded diagrams and markings are provided for six different aircraft. Without doubt this kit easily trumps the ancient Airfix example, its just a shame about the heavy-handed rivet patterns which take the gloss off an otherwise superb kit.



MustHave 1:48 North American F-86K

French newcomers Must Have! have a good idea here taking an already nice and well respected kit (Revell / Monogram's) and creating a different version along with enhanced detail, nicely packaged this really is an attractive kit. The original Revell mouldings are still very impressive with fine and sharp surface detail along with a well detailed cockpit, wheel wells, intake and exhaust. The obvious extra is a full new fuselage sporting the cannons, an easy option to arrive at this version would have been to re-tool the front section only but thankfully we're in for an easier ride with a full new fuselage(and also the original still on the main

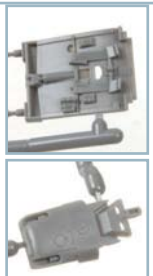
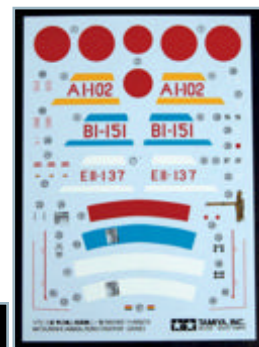
sprues). Some parts in resin give the option of a separate / positionable tail rudder (requiring surgery of the kit parts) and a new shroud/gun sight arrangement. Etched brass is offered to detail areas of the cockpit, seat and canopy to a sensible degree. A package like this needs a bumper selection of markings to round things off- no disappointment here, excellent decals and an excellent colour placement instruction offer one Norwegian, one Dutch, one French and one Italian aircraft all in aluminium finishes. A nice concept and very well done, a must-have indeed if you've a soft spot for Sabres!



Tamiya 1:48 Fieseler Fi156C Storch (Foreign Air Forces)

Tamiya's beautiful Storch is available as a limited edition release with a selection of non-German markings, three Swiss, one Hungarian (complete with skis) and one Italian providing some very attractive schemes. Tamiya's mouthwatering box-art has you wanting to get started straight away, and lifting the lid reminds us of what a high quality production this is with fine textures and surface detail. The grey sprues remain unchanged at first glance but we're not given the accessories and figures of the previous release. Detail and moulding is of the highest order with the clear and grey fuselage pieces moulded as one very impressive. Tamiya's design of the metal landing gear supports and metal

wing brace is equally impressive giving sound platforms to build the delicate detail of the canopy around and features such as separate flaps and boarding door add to the intricate look of the finished model. Separate cowls offer diorama potential displaying the fully detailed Argus engine. Along with the new decal sheet we're still provided with the printed masking sheet for the canopy which should help with this tricky part of the project. A Tamiya classic for sure offering an out of the box build with excellent levels of detail, ok, many will want to replace the decal seat belts but not the greatest of tasks.



Tamiya 1:72 Mitsubishi A6M2b Zero

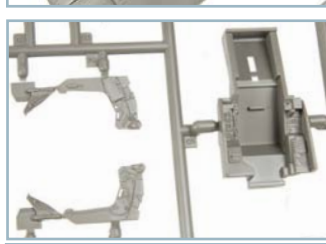
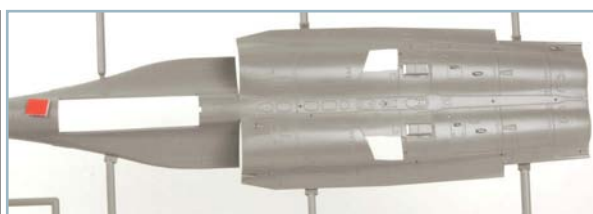
Heros of the Zeros, Tamiya, offer us another small scale variant following the high standards set by their larger scale kits. If your eyesight is still capable of dealing with 1:72, detail and finesse doesn't get any better with the finest of panel lines and surface detail. A sensible number of parts are expertly engineered to give features you'd normally expect with larger scale kits, detailed wheel wells and cockpit side-walls of particular note. The cockpit must be one of the best in the scale offered by an injection

moulded kit, thankfully an optional open canopy is provided to show it all off. The new engine cowl is again a superbly moulded single part surrounding the well detailed radial engine. Three sets of markings are provided but provide little variation all being from the second wave to strike at Pearl Harbour finished in grey-green with dark blue cowling. If you're a small scale builder you need to take a look at these new Zeros even if it's not your usual choice of subject, I can guarantee you'll be tempted!- superb!



Lifecolor Paint sets

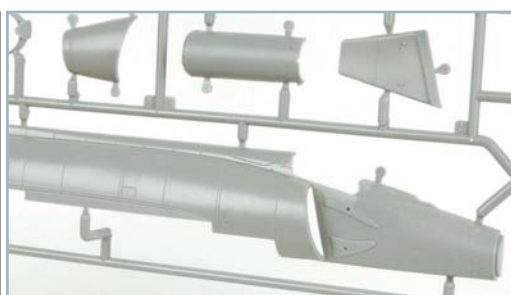
Two new acrylic paint sets from Lifecolor with the first RAF Battle of Britain set MS06 offering the dark earth, dark green and sky standard colours for RAF aircraft at this time. The green and brown seem quite tonally similar as our photo shows, how accurate this is we leave you to decide but Lifecolor paints are always a delight to use. The second set described as Leaking and Stains MS05 provides three semi transparent shades for Exhaust oil effect, Dirty Grease effect and Grease effect. These are similar to the Tensocrom colours and will allow base colours to show through. Ideal for adding realistic stains to engines of all kinds or for adding those exhaust stains down the fuselage. These and the full range of Lifecolor paints are available from www.airbrushes.com



Revell 1:48 Dassault Rafale M

A very welcome re-release from Revell is their Dassault Rafale, this highly respected kit has been around for over a decade now - hard to believe! The moulding shows no signs of age at all, the detail and design of this kit could easily pass as a new release from any of the major manufacturers, certainly 'up there' as one of Revell's most impressive productions which offers an inexpensive out of the box project. Detail standards are constant throughout with a nice cockpit, detailed plug-in wheel wells, a good selection of ordnance, excellent exhausts and superb wheels and landing gear. Surface detail is super-fine and very complete with Revell going to the trouble of adding a piece of foam on the upper

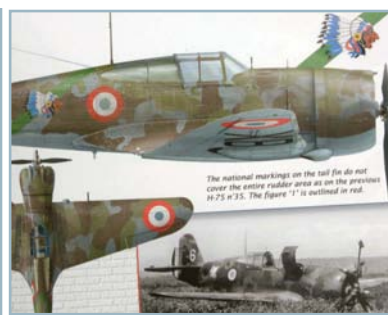
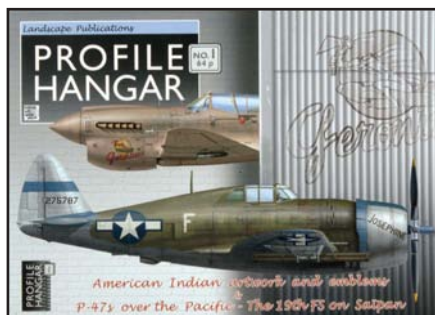
fuselage part to protect the fine antenna inside the box. The clear parts are also high quality, the single seater canopy with some fine fastener detail around the frame. The decal sheet is small considering three French versions are included (including aircraft from 'Charles de Gaulle' Operation Harmattan in the recent Libyan conflict) full stenciling is included for both the aircraft and also the unique fuel tanks, GBU 12 bombs and the MICA AM missiles. No fancy photoetch or accessories, but a superb all-rounder from Revell who's kits you'll find in all good toy and model retailers and details at www.revell.eu



Meng 1:72 F102A

New boys Meng have released their third aircraft kit, moving from the paper projects of their first releases to depict the F102A in another impressive release. The quality of moulding is very high with subtle panel lines and in a Hasegawa style only the largest rivet patterns have been depicted which is entirely appropriate for this scale. The cockpit is well detailed with three part seat sans seatbelts and a relief moulded instrument panel and the two part canopy will allow you to show off the cockpit. The exhaust nozzle features ribbed internal faces which is good to see and you also have the option to show the airbrakes open or closed. The undercarriage doors look great and there is the option to open up

the bomb bay and install a weapon load although I would like a little more guidance from the instructions regarding the payload options. The folded open bay doors look well moulded too and underwing fuel tanks are also included. The decal sheets offer a choice of three schemes, two of which are bare metal. The decals look good but the US AIR FORCE lettering which is correctly shown as dark blue on the box art is supplied in black on the decals. Spare decals from other kits may provide a quick fix here but doubtless aftermarket sheets will soon be released too. Meng continue to impress and Jet fans will be happy to see the F102 tackled with such flair.



Profile Hanger No.1

by Thierry Dekker

Published by Landscape Publications

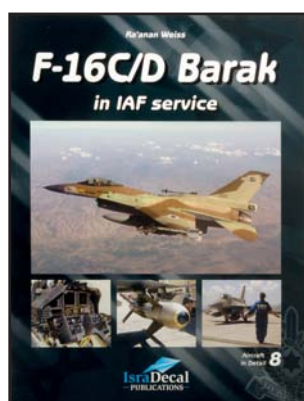
Softback A4 Landscape 64 pages

ISBN 978-2-9541405-0-6

www.landscape-publications.com

An exciting new publication from aviation artist Thierry Dekker which sets out to put accuracy, research and attention to detail at the forefront, not just to present some pleasing looking profiles. The Ultra-realistic quality of the profiles is immediately apparent with rivet detail, stains, chips and wear and tear accurately reproduced. The book is divided into two sections, the first looking at aircraft that feature American Indian emblems or artwork. It includes a wide mix of subjects from the WW1 Spad XIII, French

Curtiss H-75, Curtiss P-40, Hurricane, Typhoon, Spitfire, Hellcat and P-47. The profiles are supported by archive pictures of the actual aircraft and in some cases diagrams to point out features specific to the particular aircraft. The second section is a study of the P-47s operated by the 19th FS operating on Saipan with a total of 23 profiles. Many of these aircraft have been repainted and this makes for some interesting variations in the OD fuselage and some great modelling subjects. Where the author is dubious about colours this is brought to the attention of the reader but the period colour image shows just what a good job has been done with the profiles. Stacks of inspiring modelling subjects here and some of the very best aircraft colour profiles that you could find, this promises to be a fascinating series of reference books. Full details can be found at www.landscape-publications.com



F-16C/D Barak in IAF Service

By Ra'anan Weiss

Published by IsraDecal Publications

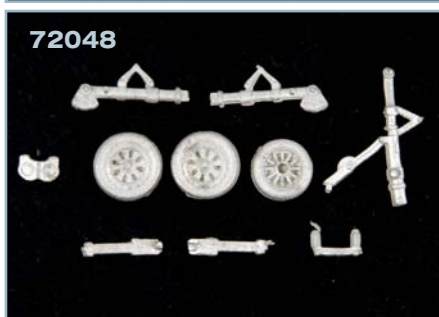
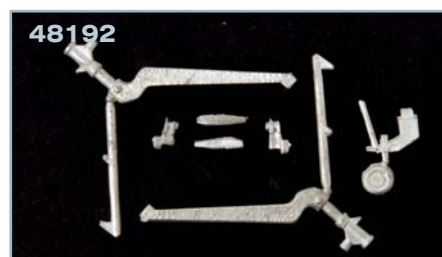
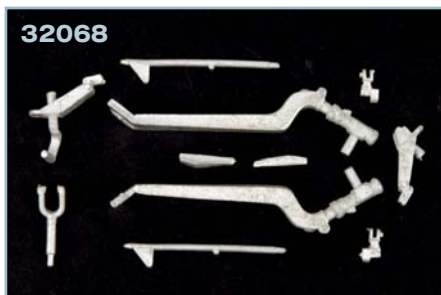
Softback A4 portrait 130 pages

ISBN 978-965-7220-18-4

www.isradecal.com

IsraDecal publications are always superb modelling references and this latest title on the F-16 in Israeli service is no exception. The book is crammed with photos and provides just about all the modeller needs from a reference. It begins with a look at the history of the aircraft with the IAF, tracing the upgrades and improvements and looking at the combat history too, supported by archive photos. The second section of the book is a twenty two page photo gallery with colour shots of the aircraft in action divided up into the different squadrons which operate them. This is followed by a section documenting combat operations with a mix of black and white and colour photos. Next are colour profiles, for a total of twenty four aircraft followed by a section of photographs covering daily routine and maintenance, loads of

useful details here for the modeller and diorama builder and great details of the aircraft being stripped down. Finally comes the massive forty six page walkaround section which covers every conceivable detail of the aircraft with differences for example in landing gear design being usefully highlighted. The weapons systems are also covered in the same detail, and again its hard to imagine that you would struggle for the required references here. As a companion to a modelling project this is the perfect reference which we would unreservedly recommend and very much a lesson on how it should be done! Full details of this and the other publications in the Isradecals range can be found at www.isradecal.com



Scale Aircraft Conversions

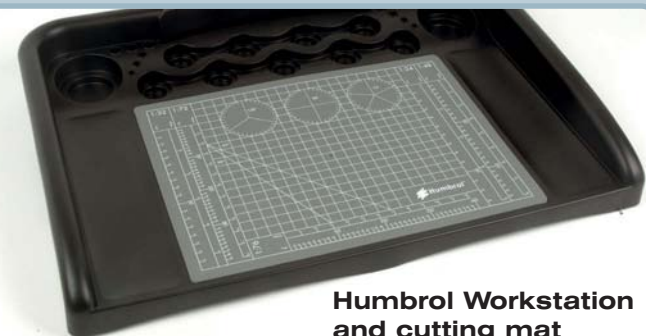
Another serving of landing gear upgrades from SAC starting with 1:32 we've 32068 for Czech Model's F2A Buffalo and in 1:48 48192 again for the F2A-3 Buffalo from Special Hobby. 48193 is designed for the F5-A from Kinetic, 48194 is to suit the Italeri or Esci MB 326, 48195 for Trumpeter's MiG-19, and Italeri's new

Wessex UH.5/HU.5 gets new legs with 48196. Kitty Hawk's F-35B gets upgraded with set 48197 and finally in 1:48 Trumpeter's MiG-23 Flogger is covered with 48198. One set in 1:72 replaces the Platz or Sword kits of the T-33. www.scaleaircraftconversions.com has details of the vast range.



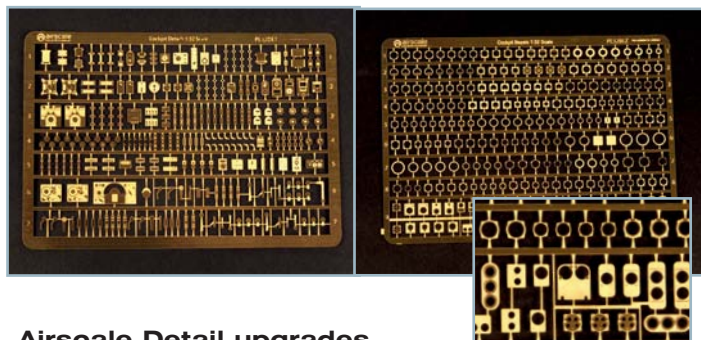
Wingnut Wings WWI manufacturer's decals

Something different here from Wingnut Wings with some 1:1 scale decals to adorn a display or anything else that takes your fancy. These have been developed to work on full size replicas so the quality is first rate. 9110001 is the Axial logo, 9110002 Albatros (left and right), 9110004 the Fokker logo, 9110005 Garuda prop marking, 9110006 is LVG's factory decal and 9110007 is the Sopwith factory logo. A Bristol prop logo will also be available with product number 9110003. Our thanks to the guys at Wingnut Wings for the samples where everything is available from them direct at www.wingnutwings.com



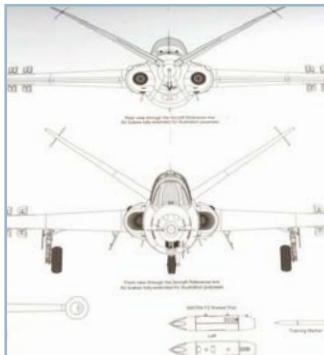
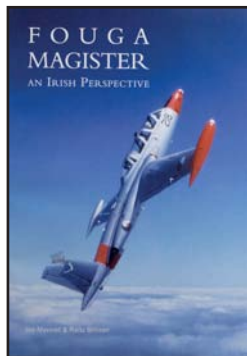
Humbrol Workstation and cutting mat

If you're one of those modellers (I think most of us!) who ends up with a clear area to work on about half the size of this magazine, maybe this could help get you organized? This sturdy plastic moulding has a recess to take an A4 cutting mat and various shapes to hold thinners, water pots, brushes and (Humbrol) paint tubs. There's also a handy slot to drop your instruction sheet into. Humbrol's separately available cutting mat is specific to modellers with handy scale rules printed on the self healing surface



Airscale Detail upgrades

Two very useful sets here from Airscale to enhance cockpit detail. PE32 BEZ is a single fret of instrument bezels covering everything from WWI through to jet engine aircraft in 1:32. PE32 DET which are to suit all types of WWII aircraft in 1:32 including switches, dial knobs, electrical components. FuG10 radio facias are included and also RAF R1155 transmitters and receivers. Very nicely done generic sets which would prove very useful especially if a specific set isn't available for your particular project. www.airscale.co.uk



Fouga Magister, an Irish Perspective

Joe Maxwell and Radu Brinzan

Published by Max decals Publications Ltd

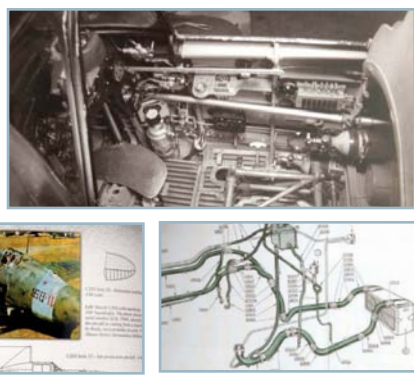
Softback portrait format 108 pages

www.maxdecals.com

ISBN 978-0-9562624-1-7

We all know you can't judge a book by its cover, but first impressions count and this new release has an immediate quality look and feel to it. The niche subject covered is the use of the French built Fouga Magister jet trainer as operated by the Irish Air Corps' light strike squadron between 1975 and 1999. This book is a mixture of good reading, as the story unfolds of the connections between France and Ireland regarding the aircraft and its

development through to first hand accounts from pilots who flew them. A chapter devoted to the IAC display team 'Silver Swallows' includes diagrams and full detail of the award winning displays. There's an abundance of quality colour shots throughout this book but the detailed modelling reference kicks in with the 'Maintaining the Fouga' chapter with excellent walk-around reference of the aircraft in various states of disassembly. More for the modeller in the shape of 1:72 and 1:48 plans which are already regarded as the most accurate available due to the obvious unlimited access the authors have had. (plans in 1:32 are also available separately) The high quality all-round package is finished beautifully with some colour profiles. An absolute must for fans of this aircraft in general and anyone with an interest in the Irish Air Corps. A great first release, highly recommended.



Macchi C.200 Saetta

By José Fernandez

Published by Mushroom Model Publications

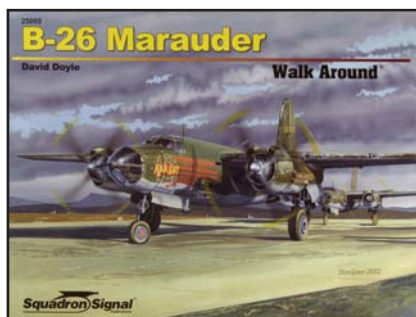
Softbacked A5 portrait 112 pages

ISBN 978-83-61421-51-1

www.mmpbooks.com

Surely one of the most famous and handsome of Italian fighters is the subject of this revised, enlarged and extended second edition from MMP. The visual reference far outweighs the text which is ideal for the modeller wishing to detail one of the available kits (Hasegawa's 1:48 production springs to mind) with a great

selection of technical manual drawings which are great to work from because of their clarity, coupled with colour photographs of the two surviving examples in a full walk-around fashion. Period black and white photographs provide exploded views of areas difficult to reach on the preserved examples including internal structures and armament. To further help us build a better model there are plans in 1:72 and also 1:48 with detail as far as riveting and the real stars of the show, the colour profiles with some fantastic schemes including German and RAF versions. The profiles are top quality and with close to thirty pages there's bound to be something to take your fancy. A massive amount of information for your money and very nicely presented.



B-26 Marauder Walk Around

David Doyle

Published by Squadron Signal

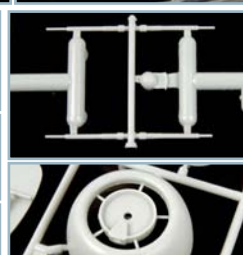
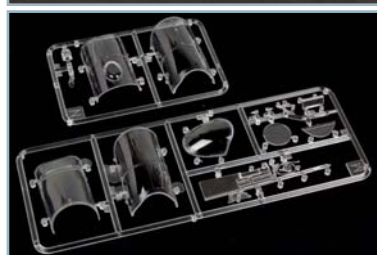
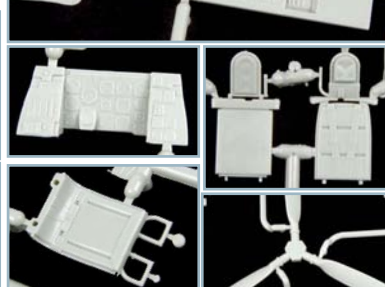
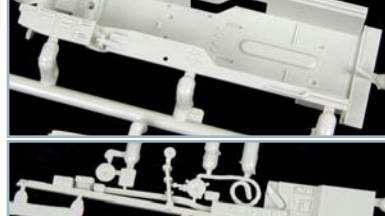
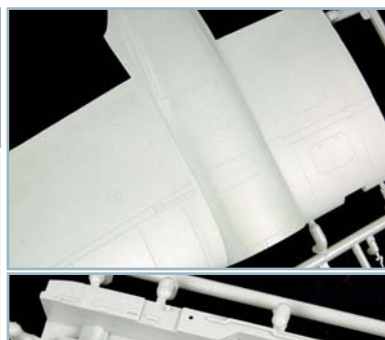
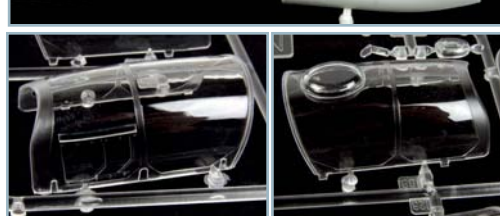
Softback landscape format 80 pages

www.SquadronSignalPublications.com

ISBN 978-03-89747-689-8

Another reassuringly familiar looking 'Walk Around' from Squadron Signal, for over forty years this series has followed the same tried and tested format delivering affordable modelling reference. It's the sleek B-26 that comes under the spotlight with this new release, a brief introduction and then it's straight into the large format reference shots of several preserved and restored aircraft.

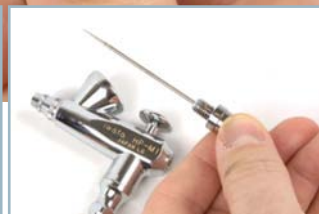
The colour photographs are big and clear concentrating on areas modellers would want to increase a kit's level of detail such as interiors and wheel wells. The majority of the text is detailed captions to the photographs, production changes to the various versions are pointed out and further explained visually by line drawings throughout the book. Particularly impressive are the shots inside the aircraft with all of the crew positions covered providing excellent colour reference. Several side-on colour profiles are also included with some good looking nose art featured. As always, comprehensive and cost effective reference for a modelling project from Squadron Signal.



Revell 1:32 Heinkel He 219 A-7 'UHU'

Well here is something we might never have expected to see released in 1:32 scale! Now we have this Revell kit and another on the horizon too! The first thing that strikes you is the huge length of the fuselage mouldings at 46.5cm long! Initial impressions are excellent with fine surface detail, restrained panel lines which are not too deep and screw/rivet detail restricted to access panels. There is a little flash on selected parts but nothing serious. The cockpit comes with a superbly moulded tub and side consoles and the radar/radio array in the rear cockpit is super-crisp. The pair of ejector seats look good too but have the dreaded moulded on seat belts, please Revell, can we have versions with and without? The instrument panel has well moulded dials with individual faces provided on the decal sheet. The fuselage comes with a separate spine panel with optional upward firing 30mm mounts and separate belly gun pod floor which should make for easy assembly. All the control surfaces are moulded separately and flaps can be adjusted to your preferred configuration.

Undercarriage looks great as do the engines but the covers on the ends of the flame suppressed exhausts look crude and heavy. The shape of the propellers has been criticized and the prop root looks too concave. No doubt aftermarket replacements will quickly offer a fix for the props. The canopies offer a choice of front section with bulged Naxos housing or the more common smooth version. The nose antennae look good with two sets angled differently included depending on your choice of radar installation. The decal sheet looks excellent and provides stencils, spinner spirals and markings for a choice of four different aircraft but lacks swastikas for the tail. An undeniably impressive release which will please many and is also sensibly priced too. Top marks to Revell for this release and the few minor issues don't in any way dissuade us from wholeheartedly recommending this excellent kit. Revell model kits are available from all good toy and model retailers. For further information visit www.revell.eu



The Airbrush Company- neo air mini compressor and Iwata Revolution 'M' Airbrush

A couple of quirky new products here from The Airbrush Company. First up is this tiny compressor which can sit on even the smallest of work surfaces with stylish simplicity. It's a simple plug and play straight from the box with a power lead and air hose included along with an airbrush holder. Operation is via a single button with three pressure settings illuminating in different colours. The pressure generated suits gravity fed airbrushes and while sufficient for most modelling applications I think it would struggle with something the size of a 1:32 bomber for instance. Sometimes a problem with air supplies without some form of storage tank is the 'pulsing' of the motor affecting the smoothness. This can be overcome by slowing down the spraying action which I found was the case here. Operation is very quiet making this an

ideal little unit if you're working around others in the home. Iwata are renowned for their quality airbrushes for many high-end applications and have introduced this entry level 'M' gravity fed single action model. At first I looked on the stubby appearance as a gimmick but on using it realised that the needle adjustment can be made with the thumb of your trigger hand. The cup is a good 7ml size complete with a cap to avoid spillage. This is a simple to use airbrush ideal for beginners with a lovely weighty, quality feel to it. This will really chuck out some paint making it great for base coats or varnishes and will still turn down for a more delicate flow too. Iwata back most products with a five year warranty, check www.airbrushes.com for more details on these new releases and everything airbrush related.

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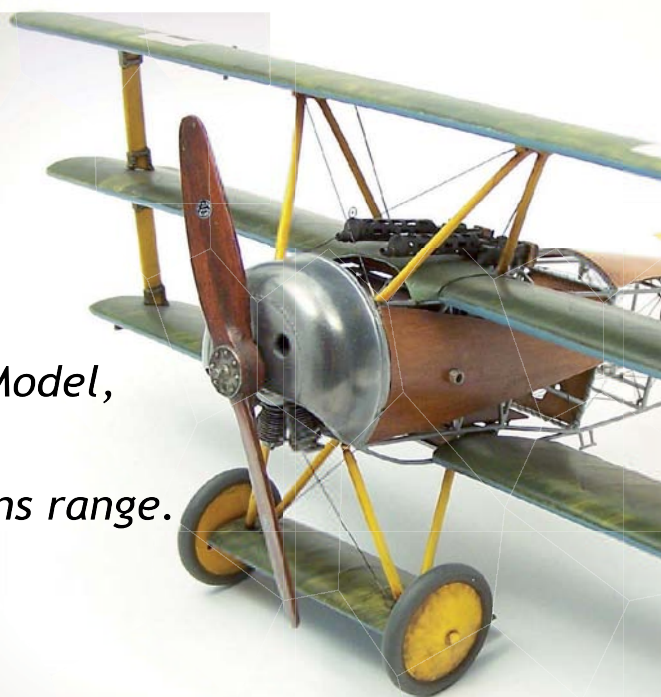
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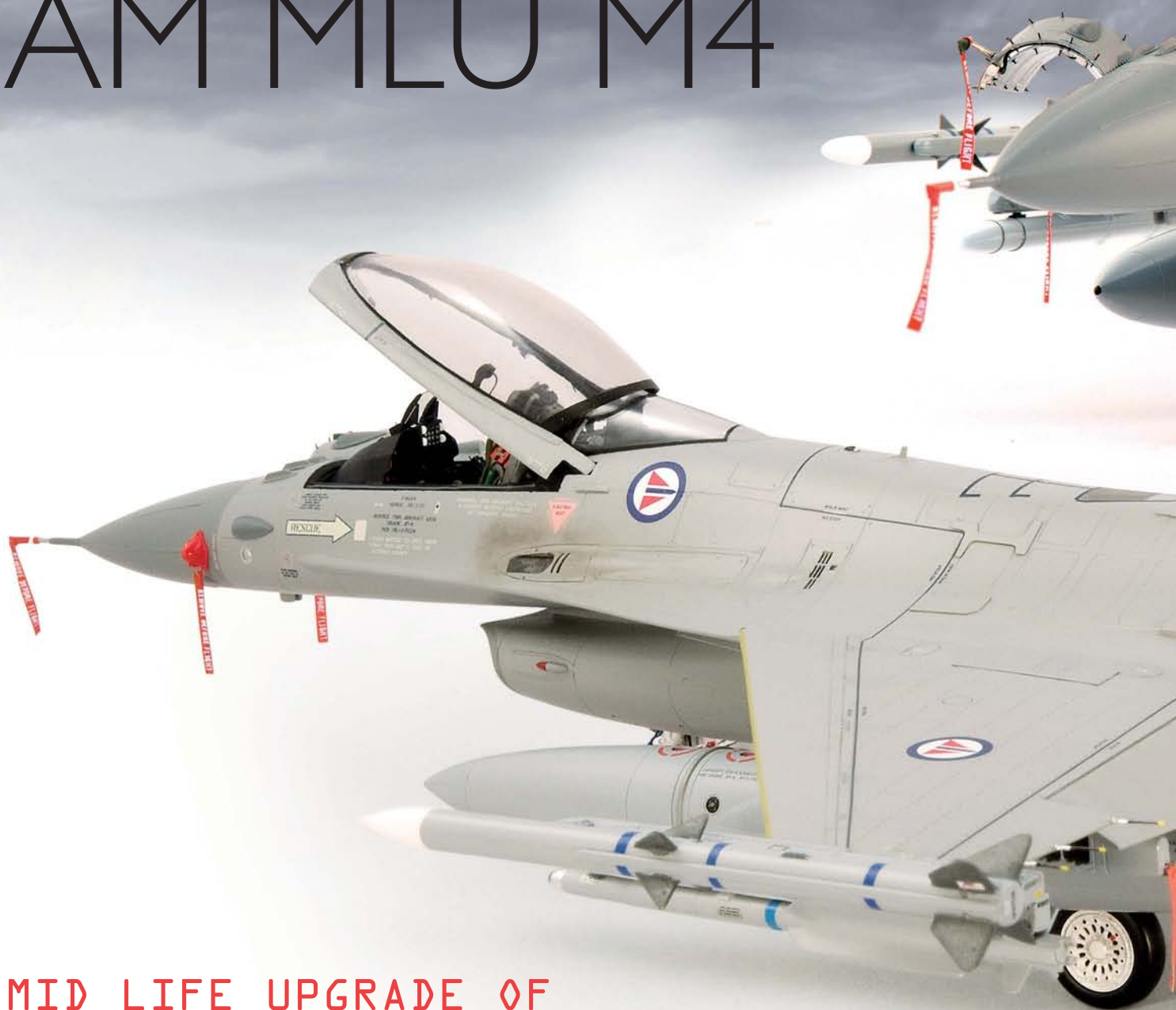


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ROYAL NORWEGIAN AIR FORCE

F-16

AM MLU M4



MID LIFE UPGRADE OF
HASEGAWA'S 1:48 F-16A PLUS



MODELLED BY OLE KJENSMO

Additional photography by Tom Dyring

During the 30 years that the F-16 has been operational with the Royal Norwegian Air Force, it has constantly been upgraded and improved as new electronics and weapons systems have emerged. However, signs of wear and tear began to emerge towards the end of the 80's. This eventually led to the Falcon STAR and MLU (Mid Life Upgrade) upgrade which is a coordinated program between USA and the European users of the F-16. These two programs introduced more structural reinforcements to prevent cracks and allowing targeting pods and new sensors to be carried, as well as modernizing the cockpit, electronics, radar and weapons systems. The MLU program itself comprises several

phases starting with the M1 phase in 1997. The transitions between the phases are overlapping as the aircraft are upgraded when convenient rather than in a strict order.

Hasegawa's model of the F-16 first came to the market in 1983-84 and it shows, as the details are simple by current standards. However, a lot of detailing sets are made to fit this kit, and both the surface detailing and shapes and proportions are good. In 1993 Hasegawa introduced a model of a Norwegian F-16A Plus with the extended parabrake housing with a brake chute and identification spotlight located on the left side of the nose.



COCKPIT

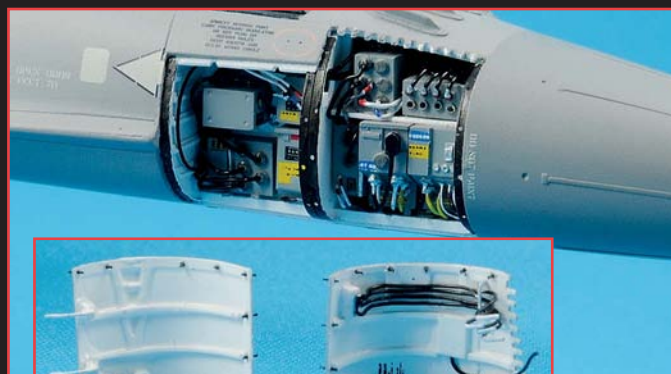
The AIRES-cockpit is fitted to the upper half of the fuselage and replaces the entire Hasegawa cockpit. One must remove the instrument panel glare shield and the part behind the seat up to the air vent on the rear bulkhead. The AIRES resin cockpit is a little too short to fit the kit; if you align the cockpit on the vertical panel line behind the seat you will have a gap between the glare shield and the front of the cockpit opening. I solved this by retaining a small part of the forward part of the glare shield and rebuilding the AIRES glare shield. The canopy's sealing strip was made from Evergreen and was placed around the adapted AIRES cockpit. The grille for the air vent behind the seat is from Verlinden's detail set. I have also added some minor details on the HUD control panel, as the control wheels were poorly defined, and missing some details. The cockpit was painted black and grey FS-36231, and then detail painted according to my references. The AIRES set does not have the latest configuration with flip-up sensors on the headrest, so I made these myself, as these are now standard in the Norwegian F-16 fleet. The instrument panel at the front of the cockpit has also been modified.

CANOPY

Hasegawa's canopy is completely without interior details and is best left closed unless you add some details. I built the interior frame from scratch using reference photographs. The lifting mechanism is from the AIRES cockpit set, and is inserted into the internal cockpit frame just as on the original. The locking hooks are taken from Verlinden's detail set. The hard part (the rear) of the canopy has only been modified by adding a rear bulkhead as well as interior framing from the Verlinden set.

As a part of the M3 level MLU upgrade introduced from 2003, the aircraft were fitted with a built in Helmet-Mounted Cueing System. The receiving unit for the helmet sight is placed in the middle on the left canopy frame. Externally, I have added strengthening plates around the canopy glass, and in front of the canopy.





Top Left The avionics bays before painting and detailing, and prior to adding the reinforcement plates and static conductors.

Top Right Completed avionics bays with paint, cables and decals



FUSELAGE

The wheel wells are very sparse, so I removed them and replaced them with AIRES wheel wells. They require a bit of work, but they fit well and are a great improvement to the model. The photo shows the main wheel and nose wheel wells assembled as well as the corrections made. "Fire Access Doors" behind the main wheel wells are not reproduced on Hasegawa's fuselage, so I have taken these from the Kinetic model as well as a missing white navigation light behind the nose wheel well. The ammunition reloading hatch for the M61 Vulcan cannon was not quite right in the Hasegawa kit either, so that too was taken from the Kinetic kit. The ventilation hatch for the cannon on

the lower surface of the leading edge root extension was removed and a new hatch was made from scratch. The interior behind this door was built using pictures from Verlinden's book *Lock-On*. While I was at it, I scribed missing panel lines and hatches.

Furthermore, there are some reinforcements that are apparent in the area between the fuselage and the air intake. These are not a part of the MLU upgrade, but rather missing details of the Hasegawa kit. New reinforcing plates for the position lights on the air intake were made, as the original ones were removed in order to correct crookedness in the air intake of the engine.



I continue with the corrections made to the tail section. Thin sheet plastic was added between the fuselage sides and root of the flaperons and stabilisers. The parabrake housing should have a serrated coating around the opening at the rear. This is reproduced by gluing small plastic triangles of 0.13mm plastic sheet around the edge except on the lower surface. Once dry, I gave them a few coats of Tamiya primer and polished with Micro-Mesh to level the transition between the plastic triangles and the primer. New mounting flanges for the antennas on each side of the brake chute are made of 0.13mm plastic sheet.

An important addition to this MLU version are the prominent reinforcing plates on the upper fuselage (the upper wing root plates were added before the MLU program). These plates were necessary to strengthen the airframe when cracks started appearing after a long time of usage, as well as for carrying heavier payloads than the aircraft was originally designed for. These reinforcing plates are sold by several aftermarket companies as photo-etch, but most are adapted for the later block versions rather than Block 10 and 15. I made the reinforcing plates myself from plasticard.

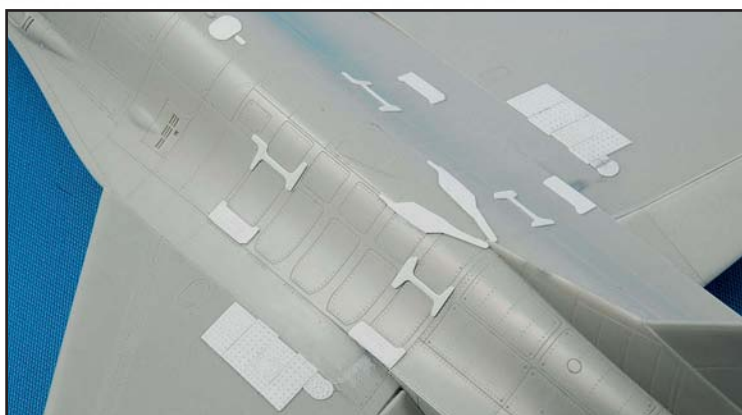
BRAKE - CHUTE

I wanted to improve the brake chute, and I sanded off the details of the chute that came with the kit. I then used photo references and added the fabric flaps from Bare Metal Foil pieces. Several layers of foil were glued together to get different thicknesses, which I then cut into proper shapes. The release cable is a bit of copper wire which was mounted after the brake chute was painted.

PYLONS/LAUNCHERS/PODS/FUEL TANKS

All the pylons and pods have been taken from the Kinetic kit. The IRIS-T missile is from Maestro Models, and the FPR (Flight Profile Recorder), is built from scratch. The pictures show pylons and pods with the modifications that were done before the parts were painted and detailed. The EOIPS pod is a modification of the Kinetic kit's PIDS with added antennas front and rear.

The SNIPER-(Pantera) pod has been given new "interior" and glass, built from scratch.



UNDERCARRIAGE

The undercarriage is pretty much unchanged throughout the years, but the rims on the main wheels have to be changed to a new type and the lights which were previously mounted on the main wheel legs have been moved to the nose wheel door and this comes with the AIRES wheel well set. The undercarriage was painted and detailed with hydraulic pipes and other minor details.

PAINTING

Norwegian F-16s are easy to paint as the entire airframe is FS-26270 Neutral Grey, though some panels are slightly different shades. All the pylons and fuel tanks are painted in FS-26375 Light Compass Grey and the SNIPER-(Pantera) pod is FS-26118 Gunship Grey. Leading edges of the wings, tail fin and ventral fins are painted with Tamiya X-24 Clear-Yellow in order to represent the anti-erosion tape. The radome is painted with a mix of FS-26270 with a few drops of FS-26118 to give a slightly darker tone.

The AIRES exhaust nozzle was painted with Alclad 2 colours (Steel, Pale Burnt Metal, Jet Exhaust, Clear Blue and Orange). The masks I have used on the nozzle have been made by a friend of mine, and makes the masking of turkey feathers easy. The internal part of the nozzle was painted white and then dirtied with black and a bit of yellow pastels.



DECALS

The decals for this model are mainly taken from Vingtor Decals' 48-101 sheet for earlier F-16A and B versions. These decals can't be used directly to make a "modern" Norwegian F-16AM-MLU. I have therefore adjusted these decals, as well as taken some decals from other decal sheets and made some myself in order to build my model. Vingtor Decals (www.vingtor.net) has since released decals for later Norwegian F-16AM MLU aircraft, 48-115, which I could have used straight on the model if they had been available at the time.





DETAILS / FINAL ASSEMBLY

As I enjoy working with sub-assemblies, the final assembly is the most enjoyable part, where you finally get to see the result of what you have built. A streamer with safety pins was mounted on the seat, which was then glued into the cockpit. The head-up display had holographic foil glued to the "glass" to recreate the effect of anti-reflective coated glass (Hasegawa/Trytool TF15). Then, I assembled the AOA probe covers – made from scratch – which are located on each side of the radome, followed by Remove Before Flight flag with safety pins. The brake chute was pushed into place with the release cable. Avionics hatches were assembled along with weapons payload, undercarriage, canopy and engine. I have limited weathering to the lower surfaces of the engine panels, undercarriage and cannon aperture, as Norwegian F-16s are typically kept very clean.



F-16

AM MLU M4



CONCLUSION

This was an extensive project, with extra upgrade sets as well as the butchery of another kit in order to build the latest version of the F-16AM. As mentioned earlier, Hasegawa's kit is old, but a sound basis to build on, and with help from the many aftermarket parts available for it you can get an excellent looking model.



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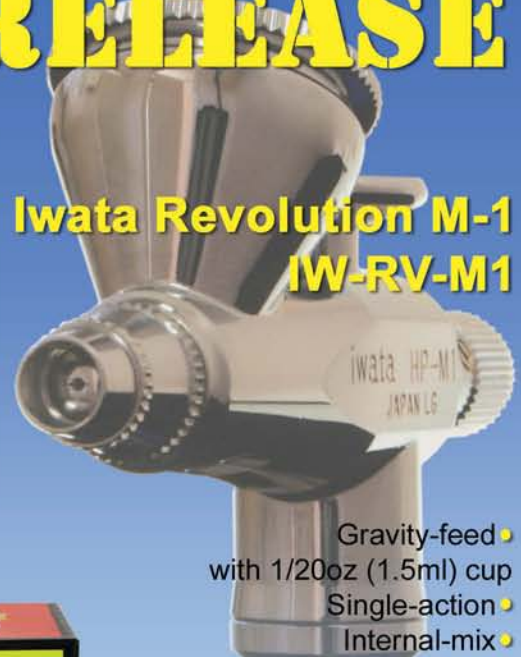


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